



PAST PAPERS

<i>Faculty</i>	<i>Department / Section/Division</i>
<i>Not Applicable</i>	<i>Learning Resource Centre</i>

Past Papers

Faculty of health science

Bachelor of Science honours in cosmetic science

Year 4 – Semester I

Document Control & Approving Authority

Senior Director – Quality Management & Administration

1st Issue Date: 2017.01.30

Revision No.00

Revision Date: 12.01.2023

Validated by: Librarian



Faculty of Health Sciences
B. Sc. (Hons) in Cosmetic Science

BCS 4113
Beauty Culture- II
4th Year 1st Semester

End Semester SEQ Examination

1st Batch



Date : 28th August 2023
Time : 9.00 a.m. – 12.00 a.m. (Three hours)

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.

- Question 1** (100 marks)
- 1.1 List five contraindication states for waxing. (10 marks)
- 1.2 Write three advantages of waxing. (15 marks)
- 1.3 Write three disadvantages of waxing. (15 marks)
- 1.4 Write three advantages of threading service. (15 marks)
- 1.5 Write three disadvantages of threading service. (15 marks)
- 1.6 Describe alternative methods of hair removal. (30 marks)
- Question 2** (100 marks)
- 2.1 List three functions of human nails. (15 marks)
- 2.2 Describe the nail structure of a human. (30 marks)
- 2.3 List five factors affecting the condition of the nails. (15 marks)
- 2.4 What is a hook nail? (20 marks)
- 2.5 What is a ski jump nail? (20 marks)
- Question 3** (100 marks)
- 3.1 Describe the treatment objectives of manicure and pedicure services. (40 marks)
- 3.2 Write short notes on following massing techniques in manicure and pedicure service.
- 3.2.1 Effleurage (20 marks)
- 3.2.2 Petrissage (20 marks)
- 3.3.3. Tapotement (20 marks)

Question 4**(100 marks)**

- 4.1 Describe the method help to determine correct length and arch of eyebrows. (40 marks)
- 4.2 What are the importance of fixing false eye lashes? (20 marks)
- 4.3 Describe the procedure of fixing and removing false eye lashes. (40 marks)

Question 5**(100 marks)**

- 5.1 Describe steps in solid nail colour application. (40 marks)
- 5.2 Describe the advices you can give to your client regarding the nailcare. (40 marks)
- 5.3 Write a short note on French manicure. (20 marks)

Question 6**(100 marks)**

- 6.1 List five products that are used for nail enhancement. (20 marks)
- 6.2 List five tools and equipment that are used for nail enhancement. (20 marks)
- 6.3 Describe contra-actions caused by incorrect applications of acrylic nail. (40 marks)
- 6.4 List four common techniques used for nail art. (20 marks)



Faculty of Health Sciences
B.Sc. (Hons) in Cosmetic Science
BCS 4143– Cosmetic Technology IV
BCS 1st Batch
4th Year 1st semester
End Semester Examination - SEQ



Date : 25th August 2023
Time : 9.00 am to 12.00 pm

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.

MATERIALS REQUIRED

- You may use a scientific calculator. This must not be programmable and may be inspected during the examination. Programmable calculators, PDAs and mobile phones are not permitted in the examinations.

01. (100 marks)

- 1.1. Explain the importance of sunscreen formulations in protecting the skin from harmful UV radiation. (20 marks)
- 1.2. Give two examples for each of the two primary types of sunscreen agents used in formulations: physical (inorganic) and chemical (organic) sunscreen. (10 marks)
- 1.3. Briefly describe the mechanism of action of physical and chemical sunscreen. (20 marks)
- 1.4. Give two key considerations when formulating sunscreen formulations. (10 marks)
- 1.5. Give four common challenges /issues that can arise during the formulation process of sunscreens. (20 marks)
- 1.6. How do you determine the SPF value of a sunscreen, and what factors can affect the accuracy and reproducibility of the measurement? (20 marks)

02. (100 marks)

2.1 You have provided a formulation of foot cream.

Urea (10%)	Salicylic Acid (1%)
Shea Butter (5%)	Peppermint Essential Oil (0.5%)
Coconut Oil (3%)	Phenoxyethanol (0.5%)
Glycerin (2%)	Water: Balance to 100%

- 2.1.1 Identify the active ingredient, emollient, humectant, exfoliating agent, fragrance, and preservative from the above formulation. (30 marks)
- 2.1.2 Propose a type of ingredient and example that can be added to increase the viscosity of the foot cream formulation. (10 marks)

- 2.1.3 This formulation is revised to introduce for athlete's foot. Which type of ingredient should be added additionally to the formulation? Give an example for the type of the ingredient. (20 marks)
- 2.1.4 Having the same consistency of the cream, which ingredients should be replaced with new ingredients to transform this formulation into a corn and callus preparation? (20 marks)
- 2.2 Discuss the role of cleansing and exfoliation in foot preparation and their benefits. (20 marks)

03. (100 marks)

- 3.1 What are some common ingredients found in cuticle removers, and what role do they play in the formulation? (20 marks)
- 3.2 How does a base coat differ from a topcoat in terms of formulation and application? (20 marks)
- 3.3 What are some potential safety risks associated with using nail polish and how can they be minimized? (30 marks)
- 3.4 What are some common ingredients found in nail strengtheners, and how do they work to improve the health and appearance of the nails? (30 marks)

04. (100 marks)

- 4.1 State two cosmetic products that can be used for hair dressing. (10 marks)
- 4.2 State five technical qualities of hair styling products. (10 marks)
- 4.3 State two major forms of hair sprays and briefly explain the two types. (40 marks)
- 4.4 Briefly describe the difference between the hair tonics and the hair conditioner. (20 marks)
- 4.5 State two advantages of using hair thickener and mentioned two types of cosmetic products that can be used as hair thickeners. (20 marks)

05. (100 marks)

- 5.1 Classify the hair -coloring agents according to their nature and solubility. (20 marks)
- 5.2 State the differences between temporary hair dye and the semi- permanent hair dyes. (20 marks)
- 5.3 Hair tonic is one kind of hair repairing tonic and re-texturing the hair and it makes your hair seem healthy and bouncy. Using too much hair tonic can have drawbacks. Briefly explain this statement. (25 marks)
- 5.4 Given ingredients are for a general formulation for a hair tonic. State the function for each ingredient given below. (20 marks)
- 5.4.1 Sea Hibiscus leaf extract
- 5.4.2 Propylene glycol
- 5.4.3 Sodium metabisulfite
- 5.4.4 Methyl paraben
- 5.5 Hair gels are also very popular hair styling products. However, spray gels easy to evenly apply to the hair and provide a weaker hold and tube and jar gels provide a stronger hold. Briefly explain this statement based on viscosity. (15 marks)

06. (100 marks)

- 6.1 Briefly compare the use of shampoo with soap. (15 marks)
- 6.2 State the categories of surfactants and briefly describe the use of surfactants in a shampoo formulation. (30 marks)
- 6.3 State the difference between clear liquid shampoo and aerosol shampoo. (20 marks)
- 6.4 State three advantages of hair waving process. (15 marks)
- 6.5 State the principle of permanent hair waving process. (20 marks)



Faculty of Health Sciences
B.Sc. (Hons) in Cosmetic Science
BCS 4153 – Perfumes and colors
BCS 1st Batch
4th Year 1st semester
End Semester Examination - SEQ



Date : 21st August 2023
Time : 9.00 am to 12.00 pm

INSTRUCTIONS TO CANDIDATES

- This question paper consists of **SIX** questions.
- Answer **ALL** questions.
- You should write legibly in black or blue ink.

MATERIALS REQUIRED

- You may use a scientific calculator. This must not be programmable and may be inspected during the examination. Programmable calculators, PDAs and mobile phones are not permitted in the examinations.

- 01. (100 marks)**
- 1.1. List **04** biological activities of essential oils. (10 marks)
 - 1.2. Write **05** benefits of essential oils and flower oils used in cosmetics. (15 marks)
 - 1.3. Differentiate the characteristic features of essential oils and flower oils. (15 marks)
 - 1.4. “Essential oils and flower oils are readily used in cosmetic industry”.
 - 1.4.1. Explain the above statement along with examples. (20 marks)
 - 1.4.2. State **02** ways of using essential and flower oils. (10 marks)
 - 1.4.3. Discuss **03** different types of essential oils used in cosmetic industry.
The answer should be included with source of essential oil, properties, and uses of essential and flower oils. (30 marks)
- 02. (100 marks)**
- 2.1. What is the main type of alcohol used in perfume and colors? (10 marks)
 - 2.2. List **05** properties of alcohol used in cosmetic industry. (15 marks)
 - 2.3. Briefly describe **03** purposes of alcohol used in cosmetic industry. (15 marks)
 - 2.4. Describe the biological pathway of ethanol production (30 marks)
 - 2.5. Describe **02** purification techniques used in cosmetic industry. (30 marks)

03. (100 marks)

- 3.1. List **05** selection criteria of synthesis of odorous materials used in cosmetic formulations. (15 marks)
- 3.2. State **03** synthetic processes of fragrance materials in cosmetic industry. (15 marks)
- 3.3. Define aldol condensation. (10 marks)
- 3.4. Write the reaction of synthesis of cinnamic acid and what is the name of the reaction involved in the synthesis process. (25 marks)
- 3.5. State **02** applications of Schiff bases used in cosmetic industry. (10 marks)
- 3.6. Write the mechanism of Schiff base synthesis. (25 marks)

04. (100 marks)

- 4.1. List **05** synthetic odorous materials that can be synthesized in the cosmeceutical laboratory. (10 marks)
- 4.2. Draw the chemical structure of following France materials. (20 marks)
- 4.2.1. Rose oxide
- 4.2.2. Musk ketone
- 4.2.3. Isopentyle acetate
- 4.2.4. Linalool
- 4.3. What are the **04** categories of synthetic musk fragrance. (20 marks)
- 4.4. List **04** precursors that can be used for the synthesis of rose oxide fragrance. (20 marks)
- 4.5. Describe the procedure of synthesis of banana fragrance used in cosmetic products. (30 marks)

05. (100 marks)

- 5.1. State **04** characteristic features of fixatives used in skin care formulations. (20 marks)
- 5.2. Briefly describe the function of fixatives. (20 marks)
- 5.3. Write the main and sub classification of below mentioned fixatives. (20 marks)
- 5.3.1. Civet
- 5.3.2. Benzyl benzoate
- 5.3.3. Storax
- 5.3.4. Dipropylene glycol
- 5.4. Write short notes on the following fixatives. (20 marks)
- 5.4.1. Ambergris and ambroxide. (20 marks)
- 5.4.2. Gum resin (20 marks)

06. (100 marks)

- 6.1. Write the biological sources of following resin types. (10 marks)
- 6.1.1. Myrrh
- 6.1.2. Asafoetida
- 6.2. List **02** chemical constituents in Cannabis. (10 marks)
- 6.3. Write **05** characteristic features of Colophony which are used in cosmetic industry as a fragrance material. (20 marks)
- 6.4. Briefly describe why the biotechnological synthesis of flavors are favored over chemical synthesis. (25 marks)
- 6.5. Describe the challenges associated with biotechnological synthesis of flavors. (35 marks)