



UNIVERSITI KUALA LUMPUR
MALAYSIAN INSTITUTE OF CHEMICAL AND BIO-ENGINEERING TECHNOLOGY

FINAL EXAMINATION
OCTOBER 2025 SEMESTER

COURSE CODE : CBB40903
COURSE TITLE : HALAL COSMETICS AND HEALTHCARE PRODUCTS
PROGRAMME NAME : BACHELOR OF CHEMICAL ENGINEERING TECHNOLOGY
(BIOPROCESS) WITH HONOURS
DATE : 25 JANUARY 2026
TIME : 9:00AM - 12:00PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consist of ONE sections.
4. Section A consist of five questions. Answer FOUR (4) questions only.
5. Please write your answer on the answer booklet provided.
6. Please answer all questions in English only.
7. Refer to the attached Formula/ Appendies. ☐ Tick if applicable

THERE ARE 6 PAGES OF QUESTIONS INCLUDING THIS PAGE

SECTION A (Total: 100 marks)

Answer FOUR (4) questions.

Please use the answer booklet provided.

Question 1

- (a) A cosmetics manufacturer plans to expand its product line into the Halal market by introducing Halal-certified skincare products.
- i. Apply **TWO (2)** principles of Halal that the company must fulfill to ensure the products comply with Halal requirements.
- (4 marks)
- ii. Analyze the importance of Halal certification for the company's market expansion and consumer acceptance.
- (6 marks)
- (b) The effectiveness of Malaysia's legislations and guidelines for Halal cosmetics and healthcare products is highly depending on several key agencies. Evaluate the roles of each agency in ensuring the integrity of Halal products in Malaysia.
- (15 marks)

Question 2

- (a) A cosmetic manufacturer intends to develop a Halal-certified skincare product using animal-derived collagen, enzyme and alcohol as the ingredients.
- i. Examine the Halal concerns for each ingredient.
(6 marks)
 - ii. Choose appropriate control measures to avoid cross-contamination between Halal and non-Halal materials during the cosmetic production.
(4 marks)
- (b) Discuss the importance of packaging, storage, and transportation in maintaining the Halal status of healthcare products.
(15 marks)

Question 3

- (a) Outline the necessary Halal guidelines for weighing and dispensing stage to ensure the integrity of raw materials is maintained in shared environment.

(4 marks)

- (b) You are conducting an internal audit of a Halal manufacturing facility and noticed that the waste management area is located directly adjacent to the "Filling and Sealing" station. Discuss the potential risks to Halal integrity posed by the current premise layout.

(6 marks)

- (c) A company producing Halal-certified healthcare supplements is implementing equipment sharing between Halal and non-Halal batches.

- i. Assess the required documentations for equipment to ensure that the company is complying to Halal requirements.

(7 marks)

- ii. Explain the impact of equipment on Halal integrity.

(8 marks)

Question 4

- (a) A cosmetic product claims to be Halal-certified but uses multiple imported ingredients from different suppliers.
- i. Outline the Halal ingredient verification process to assess the Halal compliance of the product.
(6 marks)
 - ii. Apply appropriate analytical techniques to scientifically confirm the Halal status of the product.
(4 marks)
- (b) A Halal-certified healthcare product fails microbiological testing during post-market surveillance.
- i. Evaluate the safety assessments required to ensure that a product remains safe for public consumption.
(12 marks)
 - ii. Explain the compliance requirements essential for ensuring the safety, quality, and integrity of healthcare products.
(3 marks)

Question 5

- (a) A cosmetics manufacturer intends to obtain Halal certification under MS 2634:2019.
- i. Assess the hygiene and sanitation measures required to maintain Halal integrity during cosmetic manufacturing.
(4 marks)
 - ii. Outline the requirements of packaging and labelling to ensure compliance with Halal cosmetic standards.
(6 marks)
- (b) Halal auditing is a critical mechanism for ensuring continuous compliance with halal standards in cosmetic and pharmaceutical manufacturing.
- i. Evaluate the effectiveness of adequacy audits and compliance (on-site) audits in ensuring sustained halal compliance within an organization based on the audit flow-chart.
(10 marks)
 - ii. Justify the contribution of management review towards continual improvement of the Halal Assurance System.
(5 marks)

END OF EXAMINATION PAPER

