



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

FINAL EXAMINATION
OCTOBER 2025 SEMESTER

COURSE CODE : CFB30803
COURSE TITLE : HALAL TECHNOLOGY
PROGRAMME NAME : BACHELOR OF CHEMICAL ENGINEERING TECHNOLOGY (FOOD)
WITH HONOURS
DATE : 29 JANUARY 2026
TIME : 2:00PM - 5:00PM
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 TWO sections.
4. Answer ALL questions for Section A.
5. Section B consist of four questions. Answer THREE (3) questions only.
6. Please write your answer on the answer booklet provided.
7. Please answer all questions in English only.
8. Please answer MCQ/EMQ questions using OMR sheet. ☐ *Tick if applicable*
9. Refer to the attached Formula/ Appendies. ☐ *Tick if applicable*

SECTION A (Total: 40 marks)

Answer ALL questions.

Please use the answer booklet provided.

Question 1

Answer the following questions.

- (a) List **FIVE (5)** objectives of *Syariah* (*Maqasid Syariah*).
(5 marks)
- (b) Give the status of genetically modified organisms (GMOs) based on the classification of Halal and Haram food in Islam.
(4 marks)
- (c) Define:
i. Sertu
(3 marks)
ii. *Al-Jallalah* animal
(3 marks)
- (d) List **FIVE (5)** slaughtering requirements to ensure that the chicken is properly slaughtered in accordance with *Syariah* law.
(5 marks)

Question 2

Answer the following questions.

- (a) Summarize the penalties for violations related to halal matters under the Trade Descriptions Act 2011 (Sections 28 and 29) for large industries.
(4 marks)
- (b) According to the *Manual Prosedur Pensijilan Halal Malaysia* (MPPHM) 2020, halal certification requirements are categorized into general and specific requirements. Processing area is one of the general requirements. Identify **FOUR (4)** other general halal certification requirements that must be fulfilled by an applicant before halal certification can be granted.
(4 marks)
- (c) Based on the flow process of cake production below, determine the possible Halal control points (HCPs) involved in the production.
Refer Below - Figure1 : Flow chart for preparation of Cake .
(6 marks)

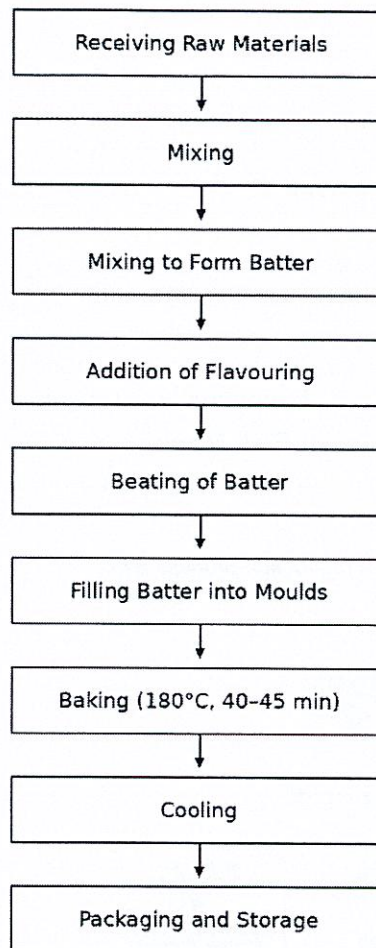


Figure 1: Flow chart for preparation of Cake

- (d) Identify the status of the ingredient used in the production of cream crackers as either critical or non-critical for halal certification consideration. The cream cracker utilizes flour, water, fat, maltodextrin, yeast extract, sodium bicarbonate, emulsifier, yellow color, salt, and monosodium glutamate.

(6 marks)

SECTION B (Total: 60 marks)

Answer THREE (3) questions only.

Please use the answer booklet provided.

Question 1

As the Halal executive, you need to identify the Halal risk for the chicken nugget production, as shown below. Evaluate your Halal Risk Management Plan (HRMP) with at least **FOUR (4)** Halal Critical Points, including the Halal risks, monitoring mechanisms, and corrective actions.

Refer Below - Figure2 : Chicken nuggets production process flow .

(20 marks)

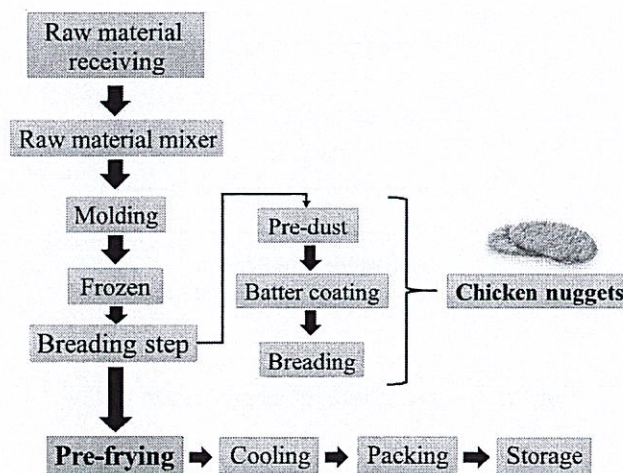


Figure 2: Chicken nuggets production process flow

Question 2

Answer the following questions

- (a) Based on the decision of the National Fatwa Council Committee, propose the relevant ruling to determine whether thoracic sticking after the slaughter of a cow is permissible in a halal slaughtering operation.

(6 marks)

- (b) Using the fermented milk processing industry, evaluate how the farm-to-table concept supports halal integrity and traceability throughout the supply chain.

(10 marks)

- (c) Obtaining Halal Certification is a voluntary initiative. Classify **TWO (2)** benefits that food manufacturers can obtain from pursuing Halal Certification.

(4 marks)

Question 3

Answer the following questions

- (a) An internal halal audit was conducted in a halal-certified frozen food processing plant as part of its Halal Assurance System (HAS). During the audit, the following findings were recorded:

- a) Several raw material halal certificates had expired and were not updated in the halal file.
- b) One processing area was found to be shared with non-halal products without proper segregation.
- c) The registered number on the halal logo displayed on the product packaging did not match the version approved by the certification body.

Based on the scenario above:

- i. Examine the **THREE (3)** relevant steps of the halal audit involved in detecting these issues.

(6 marks)

- ii. Classify each finding into the appropriate type of non-conformance.

(6 marks)

- (b) Summarize the electrical and mechanical stunning methods in terms of their process, effectiveness, and alignment with halal requirements.

(8 marks)

Question 4

Answer the following questions

- (a) Cases of halal logo misuse and certification revocation have negatively affected consumer confidence in halal products.

Evaluate how the implementation of an effective Halal Management System and Halal Assurance System (HAS) can address these issues and help restore consumer trust. In your discussion, refer to any **FIVE (5)** key elements of the Halal Assurance System as stipulated in MHMS 2020.

(15 marks)

- (b) A food manufacturer intends to use gelatin as an ingredient in a product. Apply halal requirements to determine whether the gelatin can be considered halal, based on its source and processing method.

(5 marks)

END OF EXAMINATION PAPER

