



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

FINAL EXAMINATION
OCTOBER 2025 SEMESTER

COURSE CODE : CQB 10403
COURSE TITLE : GLOBAL FOOD SECURITY
PROGRAMME NAME : BACHELOR OF FOOD SAFETY AND QUALITY TECHNOLOGY WITH
HONOURS
DATE : 03 FEBRUARY 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/ Appendices. ☐ Tick if applicable
-

THERE ARE 4 PAGES OF QUESTIONS INCLUDING THIS PAGE

SECTION A (Total: 40 marks)

Answer ALL questions.

Please use the answer booklet provided.

Question 1

Answer the following questions.

- (a) Demonstrate the relationship between the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) by using relevant examples to show how global food security priorities have shifted over time.

(10 marks)

- (b) With reference to SDG 2 (Zero Hunger), illustrate FOUR (4) practical actions that a developing country can implement to strengthen its national food security system.

(10 marks)

Question 2

Answer the following questions.

- (a) Using a timeline or schematic diagram, show the progression of the food security concept from 1974 to 2016 by linking each phase to its main focus.

(10 marks)

- (b) Relate TWO (2) dimensions of food security to current government-led initiatives and explain how these initiatives improve food availability and accessibility.

(10 marks)

SECTION B (Total: 60 marks)

Answer THREE (3) questions only.

Please use the answer booklet provided.

Question 1

Answer the following questions.

- (a) In the context of ASEAN countries, illustrate FOUR (4) key agricultural challenges and explain how each challenge influences regional food security.

(8 marks)

- (b) Based on the Singapore "30 by 30" programme, demonstrate SIX (6) sustainability measures that contribute to strengthening national food resilience.

(12 marks)

Question 2

Answer the following questions

- (a) Using a food system framework, construct a diagram to illustrate the FIVE (5) stages involved in a food system, from production to consumption.

(10 marks)

- (b) Examine FIVE (5) challenges faced by the global food system and show how each challenge affects long-term food sustainability.

(10 marks)

Question 3

Answer the following questions.

- (a) Illustrate FOUR (4) practical strategies from the EU Green Deal that a food manufacturing company in a developing country could implement to reduce its carbon footprint and enhance climate resilience in its supply chain. For each strategy, explain the specific climate-related food system challenge it addresses.

(8 marks)

- (b) With reference to the EU Farm to Fork Strategy 2030 targets, interpret a practical action plan that a food processing company could implement to achieve THREE (3) of these targets. For each target, explain how your proposed actions address both production sustainability and consumption.

(12 marks)

Question 4

Answer the following questions.

- (a) Based on FAO Food Security Framework principles, propose TWO (2) key policy components that a developing country could implement to strengthen its National Food Security Framework. For each component, analyze how it addresses the interconnections between food availability, environmental sustainability, and social equity.

(10 marks)

- (b) Select TWO (2) global food security issues and show how relevant policies or interventions have been implemented to address these issues.

(10 marks)

END OF EXAMINATION PAPER