



**FACULTY OF CULINARY ARTS**

**FINAL EXAMINATION**

Student ID (in Figures) : 

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Student ID (in Words) : \_\_\_\_\_  
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Course Code and Name : **CUL1553.v2 Nutrition and Dietary Requirement in Culinary Arts**  
 Semester and Year : May - August 2022  
 Lecturer/Examiner : Wan Ruzanna Wan Ibrahim  
 Duration : 3 Hours

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 3 parts:
  - PART A (20 marks) : ~~Answer all TWENTY (20) multiple choice questions. Answers are to be shaded in the Multiple Choice Answer Sheet provided.~~**
  - PART B (50 marks) : FOUR (4) short answer questions. Answers are to be written in the Answer Booklet provided.**
  - PART C (30 marks) : Answer ALL questions. Write your answers in the Answer Booklet(s) provided.**
2. Candidates are not allowed to bring any unauthorized materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.
3. This question paper must be submitted along with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials out of the examination hall.
4. Only ballpoint pens are allowed to be used in answering the questions, with the exception of multiple choice questions, where 2B pencils are to be used.

**WARNING:** The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.

**Total Number of pages = 8 (Including the cover page)**

**PART B : SHORT ANSWER QUESTIONS (50 MARKS)**

**INSTRUCTION(S) :** Answer **FOUR (4)** short answer questions. Write your answers in the Answer Booklet(s) provided.

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1. In your own diagram, draw and label the human digestive system in the correct sequence. (8 marks)
2. Distinguish between fat-soluble and water-soluble vitamins and give examples of each. (10 marks)
3. Proteins are made up of carbon, hydrogen, oxygen and nitrogen atoms that are formed into basic units called amino acids. They do most of the work in cells and are required for the structure, functions, and regulation of the body's tissues and organs.
  - a. Examine how proteins protect us from injury and infections. (6 marks)
  - b. Identify the process of denaturation and list **THREE (3)** examples of denaturation process that occurs in cooking. (8 marks)
  - c. John is advised by his friend to try on a high protein diet in an attempt to lose his weight. Inform John **FOUR (4)** functions of protein in the body and analyze the consequences of eating too much or too little protein. (8 marks)
4. The Food Guide Pyramid is a tool intended to help food service manager and chefs to plan healthy diets and menus. It was introduced in 1916, and since then it has been periodically updated. Build the latest Food Guide Pyramid and identify how the Food Guide Pyramid incorporate principles of variety, proportionally and moderation when planning menus. (10 marks)

**END OF PART B**

**PART C : ESSAY QUESTIONS (30 MARKS)**

**INSTRUCTION(S) :** Answer **ALL** questions. Write your answers in the Answer Booklet(s) provided.

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1. Case study

Jasmine just went to the health fair that her work was sponsoring. She is 44 and works as an administrative assistant. At the health fair they checked her weight, blood pressure and blood sugar. She is 160cm and at the health fair her weight was 75kg. Her blood pressure was 120/85 and her blood sugar was 8.5 mmol/dl, slightly higher from a normal reading. (normal reading read between 4.0 – 6.0 mmol/dl)

Jasmine is surprised that her blood sugar was high because she doesn't really eat sweets; she prefers savoury treats like potato chips. Jasmine love to cook and usually eats 3 large meals a day, but rarely taking a snacks except for drinking a can of soda and her favourite is F&N Fanta every day. Jasmine and her husband do like to go for an evening walk around their neighbourhood and do a few nights walk once in a while.

- a. Do you think that Jasmine is at risk for any food related disease? Justify your answer.  
(10 marks)
- b. Recommend **FIVE (5)** dietary advices for Jasmine to improve her health status.  
(10 marks)

2. The Malaysia Dietary Guidelines stipulate the following principles:

- i. Enjoy a variety of food
- ii. Maintain a healthy body weight
- iii. Eat adequate amount of rice and other cereal product
- iv. Minimize fat in food preparation
- v. Use small amount of salt
- vi. Reduce sugar intake
- vii. Drink plenty of water
- viii. Practice and promote breast feeding
- ix. Consume safe and clean foods and beverages.
- x. Make effective use of nutrition information on food labels.

In your own words, analyze the significance of each principle.

(10 marks)

**END OF EXAM PAPER**