

**FACULTY OF CULINARY ARTS**

**FINAL EXAMINATION**

Student ID(in Figures) : 

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Student ID (in Words) : \_\_\_\_\_  
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Course Code & Name : **CUL1593 INTRODUCTION TO CULINARY AND KITCHEN  
HYGIENE**  
Semester & Year : SEPTEMBER - DECEMBER 2023  
Lecturer/Examiner : ABDUL MUDZZAMIR  
Duration : 3 Hours

**INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 2 parts:  
**PART A (60 marks) : NINE (9) Short Answer Questions. Answer ALL questions in the Answer Booklet(s) provided.**  
  
**PART B (40 marks) : An Article Based Questions. Answer ALL questions 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 = 6 (Including the cover page)**

**PART A : SHORT ANSWER QUESTIONS (60 MARKS)**

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

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1. Chef Georges-Auguste Escoffier reorganized the kitchen by creating a streamlined workplace. What is the name of the system that is still used until today? (2 marks)
2. Name the **FOUR (4)** factors that determine how a kitchen is organized. (4 marks)
3. Elaborate the term '*Mise En Place*'. (4 marks)
4. List down the major positions in the classical kitchen brigade together with explanation of their role. (10 marks)
5. Explain the **THREE (3)** purpose of large kitchen equipment and give **THREE (3)** examples. (6 marks)
6. Explain the **THREE (3)** purpose of small kitchen equipment and give **FIVE (5)** examples. (8 marks)
7. Heat is transferred in various ways, identify and explain **THREE (3)** methods of heat transfer in cooking techniques. (6 marks)
8. Define the following kitchen terms. (10 marks)
  - a. *Deglaze*
  - b. *Saute*
  - c. *Roux*
  - d. *Mirepoix*
  - e. Double boil

9. Fill in the blanks.

(10 marks)

Liquid + Thickening Agents	Milk + Roux	Brown Stock + Roux	White Stock + _____	Chicken Stock + _____
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Mother Sauce	_____	_____	Tomato Sauce	Chicken Velouté
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Oil + Vinegar + Mustard	Oil + _____ + Lemon Juice	Oil + None + Vinegar	Clarified Butter + _____ + Lemon Juice	Chicken Velouté + Cream
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_____	Mayonnaise	_____	_____	_____
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END OF PART A

**PART B : AN ARTICLE BASED QUESTIONS (40 MARKS)**

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

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**EFFECT OF DIFFERENT COOKING METHOD ON THE QUALITY ATTRIBUTES OF CHICKEN MEAT**

**CUTLETS**

There is continuously growing demand of snacks foods worldwide due to rapid urbanization, industrialization, changing lifestyle. Cutlets are flat croquette of flour, pulse, nuts, potato, condiments, spices and often coated with bread rusk crumbs and are considered as one of the most popular snack based products. The nutritive value of cutlets can be further enhanced by incorporating meat. Meat cutlets are ready-to-eat convenient meat product, served hot, with or without mouth-watering substances like chutney. Cooking has been considered as a very critical step in the preparation of food products affecting nutritive value, organoleptic properties thus consumer acceptance. For cooking of meat products such as cutlets, frying, oven and microwave cooking are mostly practiced. There is continuously growing interest of consumers towards air fried cutlets. Colour development of the enrobed products such as cutlets depends with the amount and composition of the batter, cooking temperature and time, cooling media characteristics etc.

The breading on the fried meat has been reported to enhance the texture, flavour and appearance of the product. Adhesion is a critical characteristic for battered products and the main factors affecting adhesion of batter to food products are properties of food used, battering ingredients and cooking methods. Functionality of ingredients in batter on moisture retention and fat barrier properties during deep fat frying is not clearly understood. The effect of additives and microwave cooking on quality of spent hen chicken meat patties was studied and that microwave unpacked cooked chicken meat patties had lower moisture, less juiciness and harder. However, microbial destruction was same in microwave cooking as that of LDPE cooking. The effects of microwave oven cooking on the quality of chicken patties prepared from minced chicken meat, chicken fat, spice and condiment mixture, sodium nitrate, sodium nitrite, sodium tripolyphosphate, monosodium glutamate, refined wheat flour, chilled water and salts. It was found that microwave oven cooked patties had higher pH, lower protein, lower fat contents and higher cooking yields than cooked patties but significantly lower overall acceptability than cooked samples.

The influences of different cooking methods, pan frying and microwave oven on chicken patties with and without added fat, whey protein concentrate and flavour. Significant differences were observed for product yield, cooking loss, gain in height, reduction in diameter, moisture, protein, fat and sensory attributes between different cooking methods. With added flavours microwave oven cooking and without added flavours, pan frying method was found to be the most suitable. Deep fat frying of the coated meat products helps in achieving an acceptable texture, flavour and appearance. The temperature and time of frying is important, as the overheated product, gives a dry sensory perception. Fat absorption was also high for deep fat frying when compared to oven frying and skillet frying.

Deep fat frying is popular in commercial establishments. Less moisture loss occurred at lowest temperature frying than at high temperature, but percent yield did not vary with temperature, probably results of imprecision associated with breading or frying procedures in example breading fall off before, during and after frying. Decreased yields of chicken cooked entirely by frying at a temperature above 185°C was observed, less cooking loss in breaded steam cooked chicken compared to unbreaded water cooked parts. This effect was thought to be due to the protective coating given by the breading, which may have sealed in or soaked up juices normally lost in the steam cooking. Thus the present study was undertaken to assess the effect of various cooking methods on the development of chicken meat cutlets.

**RETRIVED FROM: Singh, T., Chatli, M., Kumar, P., Mehta, N. and Malav, O. (2018).**

**Effect of Different Cooking Methods on the Quality Attributes of Chicken Meat Cutlets.**

***Journal of Animal Research, 5(3), p.547.***

1. Identify and explain the **THREE (3)** dry heat cooking methods and the **THREE (3)** moist heat cooking methods. (12 marks)
2. What are the effects of microwave oven cooking on the quality of chicken patties? (4 marks)
3. Based on the article above list **FIVE (5)** ways to help food cook evenly in a microwave oven? (5 marks)
4. Breading/ *PANE* means coating a product before deep frying. Explain the correct procedures and illustrate a station set up for a standard breading procedure. (11 marks)
5. According to the article, the main factor affecting adhesions of batter to food products are batter ingredients. State the reason why batters are used in deep frying. Identify **FOUR (4)** reasons with explanation. (8 marks)

**END OF EXAM PAPER**