

#### **FACULTY OF CULINARY ARTS**

#### **FINAL EXAMINATION**

Student ID(in Figures)	:														
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Course Code & Name							L CU	LINA	RY ST	ODIE	51				
Trimester & Year	:	MA	Y - AL	JGUS	T 201	.8									
Lecturer/Examiner	:	NUR KHAIRUNNISAK ATHIRA BINTI AB RAZAK													
Duration	:	3 H	ours												

## **INSTRUCTIONS TO CANDIDATES**

1. This question paper consists of 2 parts:

PART A (60 marks) : SEVEN (7) Short Answer Questions. Answer ALL questions in the Answer

Booklet(s) provided.

PART B (40 marks) : THREE (3) Essay 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 = 5 (Including the cover page)

PART A : SHORT QUESTIONS (60 MARKS)

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

provided.

1. Identify **SIX (6)** types of market forms of potato that can be found in the market.

(6 marks)

2. Meat is known to be one of the most expensive items for a food establishment outlet, therefore proper ordering to ensure correct delivery is utmost important, what specification criteria should you have when ordering meat?

(11 marks)

- 3. What are the problems when it comes to cooking milk and cream products and how to prevent them? (9 marks)
- 4. Where can bacteria be found and the **FOUR (4)** ways of classifying bacteria that is practical to our work?

(11 marks)

- 5. Salads may be used as different components in a meal, briefly explain the characteristics of components of salad:- (7 marks)
- 6. Compare the differences between "dry aging" and "wet aging". (6 marks)
- 7. Various types of agents are used when thickening sauces, a chef may utilise thickening agents under the cooked category and others may use agents under uncooked, identify and explain the different types of cooked and uncooked roux.

(10 marks)

## **END OF PART A**

PART B : AN ARTICLE BASED QUESTION (40 MARKS)

**INSTRUCTION(S)** : Answer **ALL** questions. Write your answers in the answer booklet

provided.

# 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 mouthwatering 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 Journal of Animal Research: p. 547-554. 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 chevon patties with and without added fat, whey protein concentrate and flavor. 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. (2015). Effect of Different Cooking Methods on the Quality Attributes of Chicken Meat Cutlets. *Journal of Animal Research*, 5(3), p.547.

- 1. (a) Identify and explain SIX (6) dry methods of cooking and SIX (6) moist methods of cooking (12 marks)
  - (b) What are the effects of microwave oven cooking on the quality of chicken patties? (4 marks)
  - (c) Based on the journal above list **FIVE (5)** ways to help make sure that food heat or cook evenly in microwave oven? (5 marks)
- 2. Breading means coating a product before deep frying. What are the proper procedures? for breading and please illustrate a station set up for a standard breading procedure? (11 marks)
- 3. There are so many formula and variations for batters, please list **FOUR (4)** types of variation for batter and explain. (8 marks)

**END OF EXAM PAPER**