

FACULTY OF CULINARY ARTS

FINAL EXAMINATION

Student ID (in
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Student ID (in Words) :

Course Code & Name : **CUL 1593 INTRODUCTION TO CULINARY AND KITCHEN HYGIENE**
Semester & Year : MAY – AUGUST 2019
Lecturer/Examiner : NUR KHAIRUNNISAK ATHIRA BINTI AB RAZAK
Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

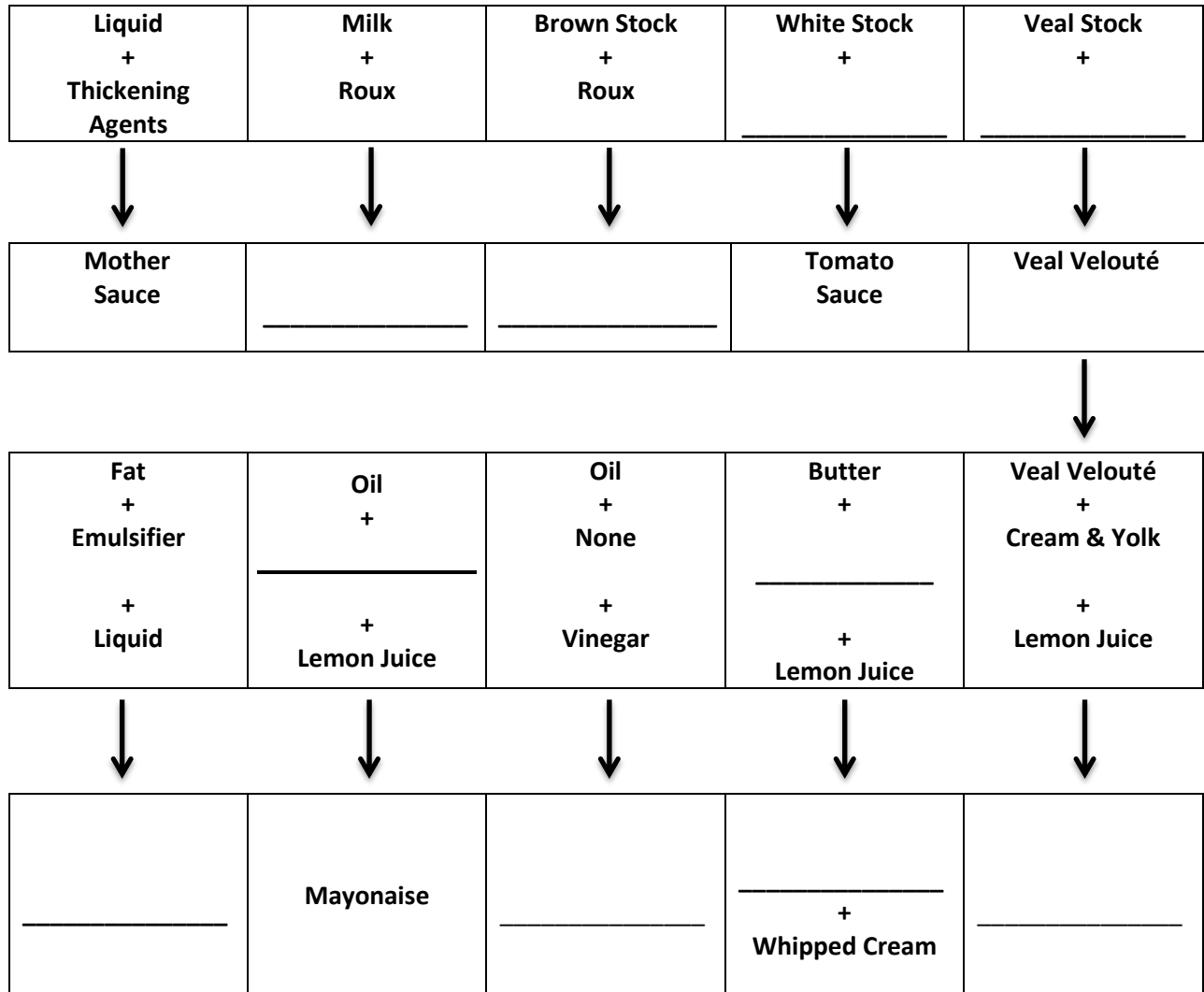
- 1. This question paper consists of 2 parts:**
Part A (60 MARKS) : Answer ALL short answer questions. All answer to be written in answer paper been provided.
Part B (40 MARKS) : Answer ALL short answer questions. All answer to be written in answer paper been provided.
- 2. Candidates are not allowed 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)



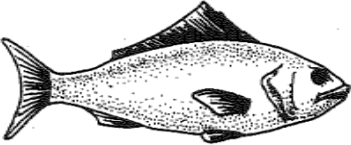


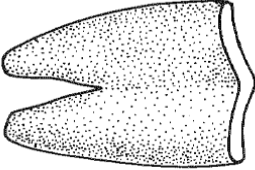
2. Fill in the blanks.

(10 marks)



3. Based on the table below, identify and explain the **SIX (6)** different fish cutting based on the illustrations given and write your answer in the answer booklet provided.

(12 marks)

TYPES OF CUTTING TECHNIQUE	EXPLANATIONS ON CUTTING TECHNIQUE
	
	
	
	
	
	

4. Point out the **FOUR (4)** main ingredients used in making brown stock with explanation. (8 marks)

5. Heat is transferred in various ways, identify and explain **THREE (3)** of them. (6 marks)

6. The usages of eggs are indispensable in the kitchen and used in both the hot kitchen and pastry, it is important to understand the characteristics of an egg to ensure good keeping qualities and a longer shelf life.

a. Recommend **THREE (3)** different forms of eggs that are obtainable in the market and provide **THREE (3)** ways how you as a chef can maintain the quality of eggs after purchased. (6 marks)

b. What is the familiar green ring you often see in hard-cooked eggs? and explain why it can happen.

(4marks)

7. Potatoes are known as a tuber and it wasn't widely used until the last half of the eighteen century. The usage of the potato varies, a thickener, served as a starch and as a side garnish.

a. Who was the person that encouraged the use of potatoes? (1 mark)

b. Explain **FOUR (4)** high quality signs of a good potato when purchasing and the most suitable conditions to store them? (7 marks)

PART B : AN ARTICLE BASED QUESTIONS (40 MARKS)

INSTRUCTION(S) : Answer **ALL** short answer questions. Write your answers in the answer scripts 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. 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. (2018).
Effect of Different Cooking Methods on the Quality Attributes of Chicken Meat Cutlets.
Journal of Animal Research, 5(3), p.547.**

1. Explain the **SIX (6)** dry heat cooking methods and the **SIX (6)** 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 journal above list **FIVE (5)** ways to help food heat or cook evenly in microwave oven?
(5 marks)

4. Breading means coating a product before deep frying. What are the proper procedures and please illustrate a station set up for a standard breading procedure?
(11 marks)

5. According to the journal above stated that, the main factor affecting adhesions of batter to food product are battering ingredients. There are so many formula and variations for batters, please list **FOUR (4)** and explain.
(8 marks)

END OF EXAM PAPER