

FACULTY OF CULINARY ARTS

FINAL EXAMINATION

Student ID (in Figures) :

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Student ID (in Words) : _____

Course Code & Name : **PAT1534 FUNDAMENTALS OF BAKING AND PASTRY**
Semester & Year : SEPTEMBER – DECEMBER 2020
Lecturer/Examiner : FARA NADIA
Duration : 3 HOURS

INSTRUCTIONS TO CANDIDATES

- 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) : TWO (2) essay questions. Answer ALL questions in the Answer Booklet(s) provided.
- Candidates are not allowed to bring any unauthorised materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.**
- 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.**
- Only ballpoint pens are allowed to be used in answering the questions, with the exception of objective 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 = 4 (Including the cover page)

PART A : SHORT ANSWER QUESTIONS (60 MARKS)

INSTRUCTION(S) : SEVEN (7) short answer questions. Answer ALL questions in the Answer Booklet(s) provided.

1. Explain the following terminologies:
 - a. Chemical hazard (2 marks)
 - b. Biological hazard (2 marks)
 - c. Temperature danger zone (2 marks)

2. You are required to prepare a chocolate ganache for coating an Éclair that you had prepared earlier. You are required to:
 - a. Identify the basic ingredients for making chocolate ganache. (2 marks)
 - b. Explain the steps for preparing chocolate ganache (5 marks)
 - c. After preparing the chocolate ganache, you found out the ganache is not smooth in texture but split. Explain the possible causes that make the chocolate ganache split. (2 marks)
 - d. Suggest an alternative technique that can be used to save the split ganache. (2 marks)

3. Below are some of the ingredients for a chocolate cake. The weight of flour is given and the proportions of other ingredients as baker's percentages are shown. You are required to show the calculation process.

<u>Chocolate Cake Recipe</u>	
Cake flour	355 gm
Baking powder	26 gm
Shortening	50 %
Cocoa powder	7 %
Milk	75 %
Caster sugar	245 gm

- a. Calculate the weights needed for shortening. (2 marks)
- b. If a formula contains 7% of cocoa powder and flour is 500 gm, determine the amount of cocoa powder needed. (2 marks)

- c. Calculate baker's percentages for baking powder if the amount of cake flour is 650 gm. (2 marks)
4. Explain **SIX (6)** purposes of using sugars and sweetening agent in baking. (6 marks)
5. In bread making, once all the ingredients are scaled and brought to the work area, the mixing of ingredients begin. There are **TWO (2)** principle mixing methods in bread dough making processes; straight dough method and sponge dough method.
- a. Explain the differences in procedure between the straight dough method and the sponge method. (6 marks)
- b. Describe the advantages of sponge method for mixing bread dough. (5 marks)
6. Staling begins almost as soon as the baked items are taken from the oven, you are required to:
- a. Define the term staling. (2 marks)
- b. Identify the factors that contribute to staling for baked products. (3 marks)
- c. What are the **THREE (3)** ways to delay staling. (3 marks)
7. Steam is used frequently within the first 5 to 10 minutes of baking for lean dough with hard crusts like French bread.
- a. Explain how steam helps in producing a crisp and thin crust. (6 marks)
- b. Suggests other methods that can be used to produce crisp crusted bread if your oven is not equipped with steam injectors. (6 marks)

END OF PART A

PART B : Essay Questions (40 Marks)

INSTRUCTION(S) : Answer **ALL** questions in the Answer booklet(s) provided.

Gelatin is a stabiliser that helps food sets, forming gel like consistency and giving form and structure to a dessert.

Question 1

Discuss **THREE (3)** steps in preparing gelatin so that it can be successfully added to desserts without forming jelly-like clumps. (20 marks)

Question 2

Bavarian cream is made of **THREE (3)** basic elements: custard sauce or *crème anglaise* (flavored as desired), gelatin, and whipped cream. Because they can be molded and decorated in many ways, Bavarian creams can be used to make elaborate and elegant desserts. You have prepared a Bavarian cream using recipe from figure 1.

PINEAPPLE BAVARIAN CREAM	
Gelatin	5 gm
Water, cold	150 ml
Egg yolks	125 gm
Sugar	300 gm
Vanilla	8 ml
Heavy cream	500 ml
Pineapple puree	300 ml

Figure 1

Unfortunately, the Bavarian cream did not set and the texture is too soft to hold its shape. By referring to the recipe in Figure 1, evaluate the factors that could have interfered with the gelling of a gelatin based desserts. (20 marks)