



FACULTY OF CULINARY ARTS

FINAL EXAMINATION

Student ID (in Figures) :

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Student ID (in Words) :

Course Code & Name : **CUL1563.v2 FOODSERVICE KITCHEN LAYOUT AND DESIGN**
 Semester & Year : September – December 2023
 Lecturer/Examiner : Mohd Rafie Bin Mohd Taib
 Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

- This question paper consists of 3 parts:
 - PART A (50 marks) : SEVEN (7) short answer questions. Answers are to be written in the Answer Booklet provided.**
 - PART B (30 marks) : Choose THREE (3) out of FOUR (4) essay questions. Answers are to be written in the Answer Booklet provided.**
 - PART C (20 marks) : ONE (1) scenario question. Answers are to be written in the Answer Booklet provided.**
- Candidates are not allowed to bring any unauthorized 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 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 ANSWER QUESTIONS (50 MARKS)

INSTRUCTION(S) : SIX (6) short answer questions. Answer ALL questions in the Answer Booklet(s) provided

1. DESIGN encompasses the entire facility with all the considerations and layout involve a consideration of each small unit or work space in a foodservice facility. Outline the term design and briefly describe **THREE (3)** types of trends in the commercial kitchen design. (6 Marks)

2. Poorly designed kitchen can make food preparation and service more difficult than it should be. Illustrate **THREE (3)** basic flow patterns in foodservice operation when designing a kitchen. (6 Marks)

3. In flow and kitchen design, elaborate these **FOUR (4)** terms below:
 - a. Back-to-Back (BTB)
 - b. Face to Face (FTF)
 - c. L-Shape
 - d. U-Shape (8 Marks)

4. State in details **THREE (3)** financial feasibility study that you must consider to open a restaurant in your selected area. (6 Marks)

5.
 - a. Identify **FOUR (4)** key environmental comfort factors at work. (4 Marks)
 - b. Classify **THREE (3)** major considerations in planning type for Front of The House type of space. (6 Marks)

6.
 - a. Power failure is the loss of electricity power network supply to end user causes of there is something get in contact with the power lines such as water, wind, dust or even humid air. Justify **FOUR (4)** types of power failure in foodservice kitchen. (8 Marks)
 - b. Define **SIX (6)** positive behaviors and habits to save energy in the kitchen. (6 Marks)

END OF PART A

PART B : ESSAY QUESTIONS (30 MARKS)

INSTRUCTION(S) : Choose **THREE (3)** out of **FOUR (4)** questions. Write your answers in the Answer Booklet(s) provided.

1. Steam is water vapour which occurs when water molecules are suspended in air by heat added to them. Steam molecules carry large quantities of heat and they return to their original form (condense) when they come into contact with cooler surface. Explain in details this kitchen steam equipment.
 - i. Steam Jacketed Kettle
 - ii. Steamer
 - iii. Convection Steamers
 - iv. Steam Tables

(10 Marks)
2. Discuss **Five (5)** practical tips for carpet maintenance.

(10 Marks)
3. Discuss various factors that need to be considered while designing and creating restaurant atmosphere. Consider the human senses.

(10 Marks)
4. Differentiate in detail between manufactured and fabricated equipment by giving the elements of specification of both equipment.

(10 Marks)

END OF PART B

PART C : SCENARIO QUESTION (20 MARKS)

INSTRUCTION(S) : ONE (1) scenario question. Answer ALL questions in the Answer Booklet(s) provided

Answer these questions based on the scenario below:

SCENARIO QUESTION 1

A huge, 17,000 square foot warehouse in Wandsworth proved to be the perfect solution to Create Food and Party Design's special logistic problems.

This very successful special event catering company had grown steadily over twenty years, organizing superb parties and events for many prestigious private and corporate clients.

Joint managing directors, Richard Groves and Caroline Gardiner, knew that, with the right commercial kitchen design, the warehouse could streamline their operation, increase efficiency and allow further growth over forthcoming years. Luckily, the project manager in charge of the structural work recommended Nelson Catering Equipment. Having worked with them previously, he knew that they would fully appreciate what Create was looking to achieve and would move fast to ensure the production kitchen was fully functional in time for the build up to Christmas – the busiest time of year when a staggering 70,000 meals need to be produced. In fact, from start to finish, Nelson designed and installed the commercial kitchen in just eight weeks. "Having a blank canvas is a kitchen designer's dream," explained John Nelson. "While the project manager was busy organizing mezzanine level offices and a customer viewing area, we were able to work with Richard, Caroline and their executive chef, Paul Harrison, to create the ultimate professional kitchen."

Nelson's starting and finishing points had to be the warehouse's rear access where goods are delivered and where the finished, chilled items are dispatched, ready for service. Here, they specified four sizeable cold rooms, each with a delivery and kitchen access point, an important feature which prevents unnecessary footfall in the busy industrial kitchen. There is one dedicated to meat and fish, one to dairy, one to fruit and vegetables and a further one exclusively to finished food.

Next was the hot prime cooking area that is designed as two large islands suites to allow several chefs to work in harmony. The spacious floor area also allows for extra catering equipment to be brought in for the peak times of Christmas and summer so all the essential extra pipework and power are discreetly concealed. The first island comprises three four-burner oven ranges, a six-burner oven range and a solid-top oven range. The second is made up of a twin fryer, three combination ovens and two stockpot stoves. Adjacent to the hot kitchen are two blast chillers to ensure hot food can be cooled the minute it is cooked.

Beyond the chillers is the cold preparation area which comprises several runs of stainless-steel tabling, sufficient for up to twenty staff to work comfortably making up cold dishes and finishing and packing foods from the blast chillers. This area has access to the dispatch cold room which is a lofty 2.4 meters high to allow extra shelving for maximum storage capacity.

The final cooking section is a self-contained pastry area Kitchen which comprises four convection ovens, a six-burner oven range and an eighty-litre mixer. Copious runs of stainless steel and marble worktops allow the creative pâtissiers free reign. The pastry kitchen also has its own cold room and walk-in freezer.

Commercial dishwasher and glasswasher areas were essential. One for the pots and utensils used in the kitchen and another, sited next to a stockroom, for the glassware and crockery brought back from events.

Carrying a refurbishment cost of £750,000, the vast majority of which was spent on the commercial kitchen, the project was a major one but, as Create continues to grow, proved to be a truly valuable investment.

Sources from:

http://www.nelsoncatering.co.uk/event_caterer_production_kitchen_create_food_design.html

1. Based on the case study, illustrate a simple floor plan showing all the equipment and location in the kitchen. (10 Marks)
2. The back dock and receiving area is located with easy access to driveways and street entrances to the property. Identify the primary determining factors needed in designing a receiving area. (6 Marks)
3. Who is Richard, Caroline and Paul in the scenario? Describe the duties of the mentioned names. (4 Marks)

END OF EXAM PAPER