



# ICM

MARCH 2017

CULINARY THEORY

**Instructions to candidates:**

- a) Time allowed: Three hours (plus an extra ten minutes' reading time at the start – do not write anything during this time)
  - b) Answer any FIVE questions
  - c) All questions carry equal marks. Marks for each question are shown in [ ]
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1. A person's eating habits will have been influenced by their individual preferences for food. Examine aspects within the following categories that have influenced our eating habits:
    - a) Geographical
    - b) Sociological
    - c) Political
    - d) Psychological
    - e) Physiological [20]
  
  2. Should the protein intake in a diet drop to an unacceptably low level, it is desirable to increase the daily intake of carbohydrate.
    - a) Explain why carbohydrate intake is essential when protein is not available. [3]
    - b) Specify the function of carbohydrate in the body. [3]
    - c) Identify the main types of carbohydrate, and establish TWO sources for EACH type. [9]
    - d) Describe the effects of cooking on starch. [5]
  
  3. The level of satisfaction with food eaten in a restaurant will have an overall effect on the 'meal experience' enjoyed by the customer. Critically examine how senses measure factors that will influence our enjoyment of food. [20]
  
  4. Effective menu planning will meet the operational needs of the hospitality unit, allowing the purchasing manager to search for the best market.
    - a) Examine factors to consider when purchasing the following categories of food:
      - i Perishable
      - ii Staple
      - iii Daily use [12]
    - b) Discuss purchasing issues that will affect the profitability of a hospitality establishment. [8]
  
  5. Whenever a kitchen is due for refurbishment, catering managers will take important decisions affecting future operational needs.
    - a) Examine factors that will be influential in the design of a kitchen. [14]
    - b) Discuss characteristics that should be considered when choosing a cutting board. [6]
  
  6. A large production kitchen will have an extensive selection of ovens and cooking equipment installed. Discuss advantages in using the following types of equipment:
    - a) Forced air convection oven
    - b) Microwave oven
    - c) Induction cooker
    - d) Steamer
    - e) Cook and hold oven [20]

*continued overleaf*

7. Hazard Analysis Critical Control Point (HACCP) is a system that critically examines each stage of the preparation and service of a dish.
- a) Construct a HACCP flow diagram for frozen poultry, from delivery to service, and indicate the Critical Control Points that need to be given particular attention to minimise health risks. [10]
  - b) Some foods require recipe modification when adopting them in a cook-chill process. Discuss what modifications you would introduce during the production of EACH of the following dishes intended for rapidly chilling the cooked food and reheating it for service:
    - i Battered fish
    - ii Scrambled eggs
    - iii Mashed potatoes
    - iv Flour-based sauces
    - v Braised meat [10]
8. Employee welfare is the responsibility of the employer.
- a) Examine facilities at work that contribute to an employee's welfare. [10]
  - b) Due to the hazardous nature of some of the work in the kitchen, it is sometimes necessary to provide personal protective equipment for employees. Specify items of personal protective equipment that may be made available to protect employees at risk. [5]
  - c) Incorrect handling of heavy loads may cause injuries to the back and other parts of the body. Describe a recognised safe way to lift items. [5]