



**FACULTY OF BUSINESS MANAGEMENT**  
**END OF SEMESTER EXAMINATIONS - APRIL 2025**

**PROGRAMME: BTHM**

**YEAR/SEM: YEAR 2/SEMESTER 2**

**COURSE CODE: BTHM 2202**

**NAME: PASTRY AND BAKERY**

**DATE: 2025-04-15**

**TIME: 2:00-5:00PM**

**INSTRUCTIONS TO CANDIDATES:**

1. Read the instructions very carefully
2. The time allowed for this examination is STRICTLY three hours
3. Read each question carefully before you attempt and allocate your time equally between all the Sections
4. Write clearly and legibly. Illegible handwriting cannot be marked
5. Number the questions you have attempted
6. Use of appropriate workplace examples to illustrate your answers will earn you bonus marks
7. Any examination malpractice detected will lead to automatic disqualification.

**DO NOT WRITE ANYTHING ON THE QUESTION PAPER**

## **Section A SECTION A IS COMPULSORY AND CARRIES 40 MARKS**

### **Question 1:**

Wheat stands as one of the most essential cereal grains globally, valued for its versatile applications in various culinary endeavors, particularly in baking. Understanding the composition, classification, and characteristics of wheat and its derived flours is pivotal for achieving desired outcomes in bakery products.

Wheat, revered for its mild, nutty flavor, comprises predominantly carbohydrates, with smaller proportions of proteins, minerals, vitamins, and water. The quality of wheat, which directly impacts flour quality, is influenced by factors such as soil, seed quality, climate, farming techniques, and manure application.

Wheat yields two primary types of flour: hard flour, derived from hard wheat, and soft flour, obtained from soft wheat. Hard flour, rich in protein, is favored for high-structured products like yeast-based pastries, while soft flour, with lower protein content, is ideal for low-structured delicacies such as cakes and biscuits.

Good quality flour is characterized by its creamish white color, strength (determined by gluten content), tolerance to fermentation, high absorption power, and uniformity in usage. Various types of flours are milled from wheat kernels, each serving specific purposes in baking.

The wheat kernel consists of the endosperm, germ, and bran. The endosperm, primarily composed of starch and gluten-forming proteins, is pivotal for bread-making. The germ, rich in nutrients, sprouts to form a new plant, while the bran serves as a protective covering.

Flour comprises starch, moisture, proteins (albumin, globulin, gliadin, glutenin), sugar, lipids, and enzymes (alpha and beta amylase). Proper storage of flour is crucial to maintain its quality, with factors like ventilation, temperature, humidity, and protection from contaminants playing significant roles.

Considering the detailed insights into wheat and flour composition, classification, and characteristics provided above:

- a) Name two flours which are not having gluten content (5marks)
- b) critically analyze the importance of understanding these aspects in the context of modern baking practices. (15 marks)
- c) Discuss how variations in wheat quality and flour characteristics influence the selection and utilization of flours in different bakery applications, emphasizing the significance of quality control measures in ensuring consistency and excellence in bakery products. (10 marks)
- d) As a baker provide a detailed description on how to store baked products.(10marks)

## **Section B ATTEMPT ANY THREE QUESTIONS; EACH CARRING 20 MARKS**

### **Question 1:**

- a) list and describe 10 specialized equipment used in the bake and pastry shop (10marks)
- b) explain in brief the use of any five identified above(10marks)

### **Question 2:**

Name and briefly describe one product that may be produced from choux pastry from each of the following categories (@ 5marks)

- a) Savory item
- b) Afternoon Tea pastries
- c) Centre piece
- d) Plated dessert

### **Question 3:**

As a pastry and bakery student identify and describe

- a) Any three types of Pastry (3marks)
- b) Any seven Baking Techniques (7marks)
- c) Any ten factors to consider when starting up a new pastry and bakery shop.(10marks)

#### **Question 4:**

- a) Define the term shortening.(4marks)
- b) State shortly why it is called shortening.(4marks)
- c) Explain three difference between butter and margarine.(12marks)

#### **Question 5:**

Explain how cocoa butter may be used in the following chocolate techniques (@5 marks)

- a) To adjust Consistency
- b) To add color
- c) Moulding
- d) Spraying.

#### **Question 6:**

a) Briefly describe the following costs and give two examples of each@ 4 marks

- i) variable costs
- ii) fixed costs
- iii) staff costs

b) explain the meaning of the following terms.

- i) gross profit
- ii) net profit