



UK FLOUR  
MILLERS

## Question Paper

<b>Module 5:</b>	<b>Flour</b>	
Date: <b>10 May 2022</b>	Time: <b>09:30 – 12:00</b>	Duration: <b>2½ hours</b>

You should have the following for this examination: **answer book, pencil, pen and ruler.**

All questions carry equal marks. The maximum marks for each section within a question are shown. Answer **ALL SEVEN** questions, starting each new question (1-7) on a **new** page of the answer book.

1.
  - a) List **FOUR** types of flour produced in the UK that are exempt from meeting nutrient levels as per the 2018 Bread and Flour Regulations. (2 marks)
  - b) Describe the characteristics of flour produced on head reduction passages. (3 marks)
  - c) State the percentage of a mill's production that goes into wheatfeed or other co products. (1 mark)
  - d) Describe what information can be gathered from the analysis of an ash curve and how it can be applied in the milling process. (6 marks)
2.
  - a) Describe how Quality Assurance differs from Quality Control, stating its advantages. (6 marks)
  - b) Describe what is meant by the term 'protein quality'. (2 marks)
  - c) Describe a gluten washing test and assessment. (4 marks)
3.
  - a) Describe how a Chopin Alveograph test is carried out. (6 marks)
  - b) Sketch and label an Alveograph curve, showing measurements, and describe briefly EACH measurement. (6 marks)

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4. a) State TWO reference methods that can be used for the measurement of protein in flour or wheat. (2 marks)
- b) Describe what affects the protein content of flour. (4 marks)
- c) List the information to be gained from inspection of a wheat sample's appearance at intake. (4 marks)
- d) List FOUR impurities that might be found in wheat at intake. (2 marks)
5. a) State a typical resistance and extensibility of a bread flour. (2 marks)
- b) Describe what a Hagberg Falling Number test measures, and how the test is carried out. (4 marks)
- c) List FOUR causes of internal coarse texture in bread. (2 marks)
- d) Explain how 'vital gluten' is used as a breadmaking ingredient. (4 marks)
6. a) List the FOUR main stages of breadmaking. (2 marks)
- b) Describe the no-time process (NTP) for making bread. (4 marks)
- c) List TWO breadmaking processes in which the use of fat is essential. (2 marks)
- d) Describe TWO forms of yeast used in breadmaking. (4 marks)
7. a) Describe TWO types of household pre-packed flour. (4 marks)
- b) Describe the manufacturing process of 'high ratio' cake flour. (4 marks)
- c) Describe what is meant by a 'green' or 'under ripe' dough. (1 mark)
- d) Describe briefly how puff pastry is made. (3 marks)