



Final Draft Question Paper

Module 5:	Flour	
Date: 13 May 2014	Time: 09:30 – 12:00	Duration: 2½ hours

You should have the following for this examination: **one answer book; pencil, pen, calculator 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) Explain briefly why folic acid is being considered as an additive to flour in the UK. (2 marks)
 - b) State which flours in the UK are exempt from the Bread and Flour Regulations in respect of nutrient addition. (2 marks)
 - c) Describe briefly how flour is produced in the break system. (2 marks)
 - d) State which flours are considered to be 'top grade' and normally directed to the finished flour. (1 mark)
 - e) State which flours are considered 'low grade'. (2 marks)
 - f) Describe the term 'Quality'. (3 marks)

2.
 - a) Describe the knowledge and understanding required by well-trained and competent laboratory staff. (6 marks)
 - b) Explain briefly why moisture content in wheat is significant at intake. (2 marks)
 - c) Convert the protein contents below to:
 - i) a dry matter basis;
 - ii) an 'as stated 14% moisture' basis. (4 marks)

As found Moisture	As found Protein
15.7	13.0
13.6	13.5

(Show all workings and declare answers to 2 decimal points.)

3.
 - a) Describe what is measured by a flour purity test. (2 marks)
 - b) Describe the factors that affect flour purity. (6 marks)
 - c) Explain what mycotoxins are and why they are significant. (4 marks)

continued overleaf

4. a) Describe how an Extensograph test is carried out and what it measures. (8 marks)
- b) For EACH of the following, sketch an Extensograph curve and give typical measurements:
- i) Bread flour; (2 marks)
- ii) Biscuit flour. (2 marks)
5. a) Describe briefly why and how baking tests are carried out. (6 marks)
- b) List the main ingredients of leavened bread. (2 marks)
- c) Explain the function of salt in the baking process. (4 marks)
6. a) Describe the sponge and dough process used to make bread. (4 marks)
- b) State the likely causes of bread becoming crumbly. (3 marks)
- c) List the factors that can cause flying top crusts on bread. (3 marks)
- d) Explain why soya flour may be used as an ingredient in bread. (2 marks)
7. a) List the TWO main types of pizza base made in the UK and the type of flour used to manufacture EACH of them. (4 marks)
- b) List the ingredients, in percentage (%) flour weight, for a High-Ratio sandwich cake. (4 marks)
- c) Describe briefly the term 'checking' and why it occurs in biscuits. (4 marks)