



UK FLOUR
MILLERS

Question Paper

Module 4:	Product Handling, Storage and Distribution	
Date: 10 May 2021	Time: 09:30 – 11:30	Duration: 2 Hours

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

All questions carry equal marks. The maximum marks for each section within a question are shown.

Answer **ALL EIGHT** questions, starting each question (1-8) on a **new** page in the answer book.

1.
 - a) **Outline THREE disadvantages of packing from bulk bins as opposed to packing directly from the mill.** (3 marks)
 - b) **List FOUR methods of bin content monitoring.** (2 marks)
 - c) **Describe the TWO basic types of batch blending and mixing plants.** (4 marks)
 - d) **List THREE disadvantages of batch blending.** (3 marks)

2.
 - a) **Describe the operation of an explosion relief panel in a storage bin.** (6 marks)
 - b) **Define the term 'bridging', when applied to flour storage bins.** (1 mark)
 - c) **Describe the design considerations to prevent bridging in:**
 - i) **Rectangular bins;** (2 marks)
 - ii) **Cylindrical bins.** (2 marks)
 - d) **Explain the impact of debranning in mills on the storage of wheatfeed.** (1 mark)

3.
 - a) **Describe the operation of an automatic palletiser.** (6 marks)
 - b) **Describe briefly SIX factors which should be taken into account when choosing a sack design.** (6 marks)

continued overleaf

4. a) List SIX items of mandatory labelling information under the UK's Food Information Regulations. (3 marks)
- b) i) Outline the operation of a typical conveyor metal detector. (4 marks)
 ii) List FIVE factors that affect the strength of the signal picked up from a piece of metal by a metal detector. (5 marks)
5. a) i) Describe the operation of a pallet inverter. (3 marks)
 ii) State TWO tasks for which a pallet inverter can be used. (1 mark)
- b) Describe FOUR storage requirement considerations when designing a warehouse. (8 marks)
6. a) Outline SIX daily checks that are required to be carried out on a fork lift truck. (6 marks)
- b) i) State why accurate stock control is important. (2 marks)
 ii) Describe how bulk flour stocks are checked. (2 marks)
 iii) Describe how bagged flour stocks are checked. (2 marks)
7. a) List the SIX 'rights' of logistics. (3 marks)
- b) Describe THREE of the major elements of the logistics cycle. (6 marks)
- c) Outline THREE methods of loading a bulk flour tanker. (3 marks)
8. Describe SIX critical steps in the ongoing cycle of an integrated pest management programme. (12 marks)