



UK FLOUR  
MILLERS

## Question Paper

<b>Module 4:</b>	<b>Product Handling, Storage and Distribution</b>	
Date: <b>9 May 2022</b>	Time: <b>09:30 – 11:30</b>	Duration: <b>2 Hours</b>

You should have the following for this examination: **answer book, pencil 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) **With the aid of a sketch, describe the operation of a fluidised bin discharger.** (6 marks)
- b) i) **List the THREE main types of mechanical bin discharger.** (3 marks)  
ii) **Describe ONE of these mechanical dischargers.** (3 marks)
2. a) **State the TWO basic types of batch blending and mixing plants.** (1 mark)
- b) **Outline THREE advantages and THREE disadvantages of batch blending.** (6 marks)
- c) **Describe the TWO main methods used to exhaust storage bins.** (3 marks)
- d) **Describe the design considerations to prevent bridging in cylindrical bins.** (2 marks)
3. a) **Describe briefly the TWO main types of magnet installed between redressing and packing.** (2 marks)
- b) **Explain how the strength of a magnet is checked.** (2 marks)
- c) **Outline the reasons for installing a redresser in the packing process.** (1 mark)
- d) i) **Describe the operation of a product in flight metal detector.** (5 marks)  
ii) **Outline TWO methods of testing a product in flight metal detector.** (2 marks)

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4. a) i) State TWO reasons why bags must be marked clearly. (1 mark)  
 ii) Outline the THREE main types of bag marking system. (3 marks)
- b) State TWO ways of stowing bags on a pallet. (1 mark)
- c) Outline the THREE considerations that should be taken into account when choosing pallet racking. (3 marks)
- d) List FOUR disadvantages of block stacking. (4 marks)
5. a) Describe the TWO main advantages and TWO main disadvantages of counterbalance forklift trucks. (6 marks)
- b) For EACH of the following activities, explain which type of forklift truck would be most suitable:  
 i) General warehousing; (2 marks)  
 ii) Load marshalling. (2 marks)
- c) List FOUR safety devices with which a forklift truck may be fitted. (2 marks)
6. a) Describe SIX factors to be considered when designing the layout of a warehouse. (6 marks)
- b) List SIX reasons why a customer may return goods. (6 marks)
7. a) i) State the reason for introducing the Driver Certificate of Professional Competence (DCPC) in the UK. (1 mark)  
 ii) Outline the FOUR distinct parts a new driver coming into the industry is required to complete. (4 marks)
- b) List FOUR instructions a driver should receive from the customer at the bulk flour delivery point. (2 marks)
- c) Outline FIVE safety aspects that must be adhered to during the unloading of a bulk road tanker. (5 marks)
8. a) Describe the following methods of space treatment:  
 i) Mist spraying; (4 marks)  
 ii) Insecticidal smoke. (4 marks)
- b) Explain the terms:  
 i) Bait shyness; (1 mark)  
 ii) Poison shyness. (1 mark)
- c) List FOUR rodent poisons (rodenticides) that may be used in and around the mill. (2 marks)