

**ADVANCED GCE
BUSINESS STUDIES**

2877

Further Operations Management

FRIDAY 25 JANUARY 2008

Morning

Time: 1 hour 30 minutes

Additional materials (enclosed): Answer Booklet (8 page)

Additional materials (required):
None



INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the spaces provided on the Answer Booklet.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- If you need extra sheets of paper, fasten these sheets securely to the Answer Booklet.

INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- You will be awarded marks for the quality of written communication where an answer requires a piece of extended writing.

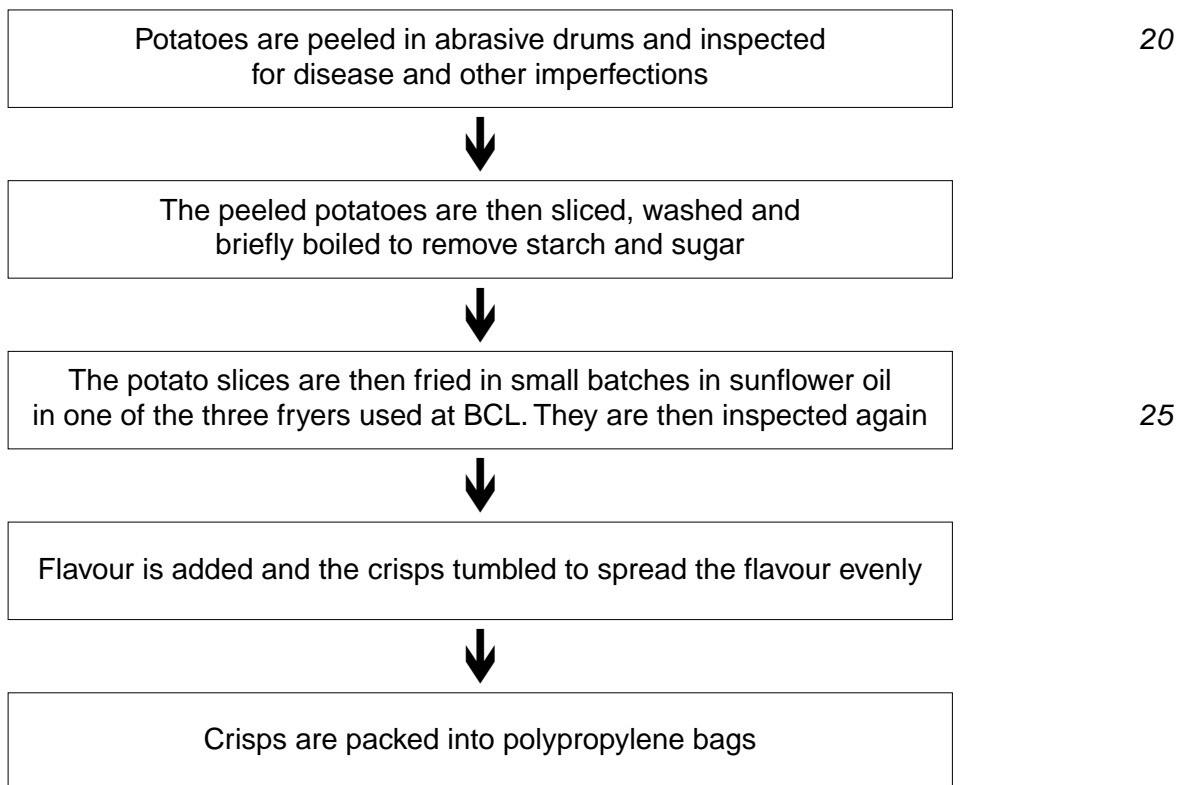
This document consists of **4** printed pages.

BURRELL'S CRISPS LIMITED (BCL)

Potato crisps have been produced in the UK for almost 100 years. However, it was Smith's Potato Crisp Company Ltd which became the first company to produce them for a large market, using factory production methods. In the 1960s Golden Wonder introduced new production and packaging methods, as well as new flavours. Today Walkers, a subsidiary of Pepsico, dominates the market. However, the market has changed over the last few years and there is a growing segment for premium priced gourmet crisps. 5

A typical example of a business in this sector is Burrell's Crisps Limited (BCL). Based in Queenstrow, Cornwall, BCL produces 'hand-fried' crisps made from locally sourced materials, including potatoes from its own and neighbouring farms. The business began when Nick Burrell felt he had to diversify his farming business. He was unable to sell his top quality organic potatoes and make a reasonable profit, so he looked for other ways to add value. Production of BCL's 'hand-fried' crisps began on a small scale with Nick supplying a number of local independent retailers and delicatessens in the South West. The business has grown rapidly and several of the major supermarket chains have made enquiries about stocking BCL's products. However, supplying these chains would mean major operational changes. Current customers could no longer be guaranteed deliveries, as the large chains would demand that their orders should take priority. With this in mind Nick and BCL's Operations Director, Jon Moore, took the decision to sell only to quality food stores such as Waitrose and Harrods. 10 15

Crisp manufacturing is basically a very simple batch production process:



BCL is very keen to be seen as a company which takes a responsible approach to environmental issues. A recent environmental audit by Jon Moore identified three key areas where waste occurs. Jon believes all these changes could bring significant cost savings, which he calculates would equal 4% of BCL's current turnover. This would, therefore, make a significant contribution to profits. His calculations are shown in Table 1 below. 30

Table 1 Environmental Audit – Cost Savings

PROBLEM	AREA	SOLUTION	COST SAVING per year at current prices	
Many potatoes and crisps are thrown away before, during and after the production process	Peeling and frying	Better training of the production line staff on quality control	£14 000	35
Waste of flavouring and seasoning due to uneven application. The number of flavours produced has increased in recent years	Flavour section	Invest in new equipment	£7 000	40
Energy costs have risen significantly in the last two years	The cooking process, but also in other areas of the factory	Installing a more efficient heat exchanging system	£x	45
Total saving on running costs per year (4% of BCL's annual turnover)			£y	

BCL now employs 25 people, and as demand for its products has grown steadily for the last 10 years, the company has outgrown its present site. As a result the company is looking to relocate to a new factory. This would give it much more floor space to accommodate higher levels of production, and greater storage space for raw materials and finished products. BCL also plans to take on additional staff, which will be welcome news in an area of high unemployment. Jon Moore is currently producing a report outlining the key factors which will influence BCL's choice of a new location. Nick Burrell feels, to meet higher levels of demand, BCL will also need to invest in equipment which will enable the company to use more efficient flow production methods.

Answer **all** questions.

- 1 (a) Analyse **two** operational benefits to BCL of having locally sourced raw materials. [6]
- (b) Discuss the operational implications for BCL of switching production methods from batch to flow. [10]
- (c) Evaluate the key factors which Jon Moore might consider to be significant when choosing a new factory location for BCL. [16]
- 2 (a) BCL's current turnover is £1.5 million a year. With reference to Table 1, based on the current year's turnover, calculate the missing figures £x and £y. [4]
- (b) Evaluate the implications for BCL of adopting more environmentally friendly business operations. [16]
- (c) Analyse **two** internal economies of scale which BCL might gain from expanding its scale of operations. [6]

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