

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Advanced Subsidiary GCE

BUSINESS STUDIES

Business Behaviour

CASE STUDY

JANUARY 2001

2873/CS

May be opened and given to candidates upon receipt.

INSTRUCTIONS TO CANDIDATES

This copy may **not** be taken into the examination room.

The business described in this case study is entirely fictitious.

This paper consists of 4 printed pages.

Greengage Mouldings Ltd (GML)

Established in 1970, GML manufactures moulded plastic at their Manchester factory. For 30 years it has concentrated on door furniture sold to DIY stores, furniture shops and ironmongers. Its product portfolio consists largely of numbers for front doors, door handles, door hooks and door name signs such as 'bathroom' or 'Amy's room'. These are supplied direct to retailers and sold usually as the retailer's own-label product. Apart from attending an annual plastics trade fair, GML has not attempted to market the product other than to establish good business relations with the buying officers of the retailers. Table 1 gives some information relating to the year ending September 2000, the end of its financial year.	5
All profit last year was retained in the business. No dividends were paid to the only two shareholders, Brian Greengage and his wife Beryl, although they both drew a salary included in the fixed costs shown in Table 1. All stock valuations were the same at the end of the year as at the beginning.	10
In addition to Brian and Beryl, the business employs 17 people. Of these 11 are female and 12 are part-time. Table 2 gives relevant information.	15
Brian and Beryl were concerned that all their workforce had less than ten years service. In fact, labour turnover was quite fast with a low average of years served compared with other firms on their industrial estate. There were several light engineering or assembly plants within a kilometre of GML and the available workforce observed wage rates keenly. In each of the last ten years, GML had ended the year with about half the same workforce as they had started it. However, a number of their workers drifted in and out of GML: five of the 17 in Table 2, all with less than three years service, had worked for GML at least twice before.	20
In October 2000, Brian and Beryl had an approach from the purchasing manager of a major nation-wide supermarket chain. GML had not done business before with this chain and the manager indicated clearly that the supermarket was looking for a permanent relationship with suppliers. She asked GML to tender for manufacturing and supplying 100,000 plastic picnic sets to be sold under the chain's own-label in its stores. Each picnic set would comprise six place settings each of two plates, bowl, tumbler (capable of taking hot and cold drink), knife, fork, dessert spoon and teaspoon, all in a container with a handle. The supermarket would pay GML £7 per picnic set. Delivery would be in February 2001 ready for the next summer season. The quality specification was rigorous. The machine re-setting needed was at or beyond the limit of the specification of GML's present machinery, which was in any event coming to the end of its useful life.	25 30 35
Brian said to Beryl, 'We can now get on with buying the new machinery we've wanted for several years. This is the chance to expand. Who knows where this could lead?'	
'Probably to the receiver,' said Beryl, always the sceptic. 'Let's look at the figures.'	
Brian told her that the unit materials per set would be £2.20 and the unit direct labour cost would be £4.00. 'But there are other costs involved surely, and the present machinery will not cope,' said Beryl.	40
Brian and Beryl were still weighing up the possibilities a few days later, when a dog food manufacturer contacted them about a special order. The manufacturer was planning a Christmas marketing campaign and wanted to give away dog bowls with	45

a new dog food as a promotion. They would pay £0.25 per unit to GML for 50,000 bowls with a logo inscribed. Brian and Beryl reckoned that the unit materials cost would be £0.05 and the unit direct labour charge would be £0.07. Delivery would be by mid-November and the dog food manufacturer needed confirmation by mid-October. 'We ought to take this order and forget grand ideas,' said Beryl. 'We could switch production from door numbers.'

GML's machinery was now old and had a nil book value. It was still working adequately and suited the mass production methods and long production runs. Stock levels were very high but this prevented loss of production. GML organised production so that one worker would concentrate for a long period on making one item, for example a door hook of a particular design. Quality was poor and eventually in response to customer complaints and not to miss delivery deadlines, Brian and Beryl had decided to position one of the workforce on watching the production flow off the machine onto the conveyor belt to pick out defects. This job was particularly hated.

There were two options to consider.

Option A was to keep going with the present machinery. While it was fully depreciated, it was still producing adequate volumes of saleable output. If GML kept its present machinery, it would need to spend £80,000 on a major overhaul. The percentage down time in re-setting would be about 5% and the breakdown time would be about 3%. These could rise as the machinery got older. Sales volume could probably not rise much. The production methods meant that the workers were bored at their work but they had not asked for change and seemed motivated only by money.

Option B was to dispose of the old machinery for £10,000 and buy a state of the art moulding machine for £250,000. This machine would be depreciated on a straight line basis to a nil book value over four years. This machine would allow greater flexibility as it could be switched frequently for short production runs. This could reduce direct labour costs by 10%. The down time and breakdown time were negligible. The quality was reckoned to be very high. A new stock policy could be introduced reducing materials by 20% and would allow existing sales volume to rise by 50%, if Brian and Beryl took a new approach to production and methods of working. Option B would remove any capacity constraints for the foreseeable future.

While they were considering these options, Lorraine, the works supervisor came to see Brian and Beryl. 'There are rumours flying around the factory about major changes, new machinery, re-training, redundancy, depending on who's talking. Some of the staff say that they are bored and de-motivated here. They would like to know if they are going to have a job. You need to do something before everyone finds work somewhere else on the estate!'

Table 1

Product	Total costs			Units sold	Price sold to retailer
	Materials	Direct labour	Allocated fixed costs		
	£	£	£		
Numbers (set)	51,300	60,800	85,000	190,000	£0.80
Handles (each)	79,800	90,300	85,000	210,000	£1.50
Hooks (each)	72,150	79,950	85,000	195,000	£1.30

Table 2

Serial	Name	Sex	Length of service	Full time	Part time
1	Muriel	F	3 months		PT
2	Leslie	M	5 months		PT
3	Janet	F	6 months		PT
4	Anand	M	8 months	FT	
5	Sikin	F	9 months		PT
6	Deepa	F	10 months	FT	
7	Frederick	M	11 months		PT
8	Alex	M	1 year	FT	
9	Wilhemina	F	1 year 6 months		PT
10	Rosie	F	2 years 5 months		PT
11	Hilda	F	2 years 6 months		PT
12	Frank	M	2 years 9 months	FT	
13	Gerri	F	5 years 3 months		PT
14	Emma	F	5 years 6 months		PT
15	Ian	M	8 years 9 months		PT
16	Lorraine	F	9 years	FT	
17	Elaine	F	9 years 3 months		PT