

CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education  
Advanced Subsidiary Level and Advanced Level

**BUSINESS STUDIES**

**9707/02**

Paper 2 Data Response

October/November 2003

**1 hour 30 minutes**

Additional Materials: Answer Booklet/Paper

**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.  
Write your Centre number, candidate number and name on all the work you hand in.  
Write in dark blue or black pen on both sides of the paper.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

The businesses described in this question paper are entirely fictitious.

This document consists of **3** printed pages and **1** blank page.



**Round plc**

Round *plc* manufactures a range of bicycle wheels. Recently, competitors have lowered prices to increase their *market share*. Round *plc* must try to cut costs to be more competitive. One method is to introduce new technology. For example, a new machine would improve both the speed and quality of production. It would also reduce labour costs and waste products. The machine costs \$300,000. It will be depreciated over a five year period. It is likely to have a residual value of \$20,000. The net cash flows of this investment are estimated to be: 5

End of year 0	(\$300,000) (the cost of machinery)	
End of year 1	\$120,000	
End of year 2	\$140,000	10
End of year 3	\$180,000	
End of year 4	\$160,000	
End of year 5	\$120,000 (including the residual value)	

One of its major customers, JP Bicycles (JPB), has just moved to a new factory. It is planning to use Just-In-Time production. Round *plc* will have to meet the demanding delivery schedule. 15

(a) Define the following terms:

(i) *plc* (public limited company) (line 1) [3]

(ii) *market share* (line 2) [3]

(b) (i) Using the straight-line method, calculate the annual depreciation of the new machine. [2]

(ii) Explain the effect of this depreciation on Round *plc*'s balance sheet. [2]

(iii) Calculate the average rate of return (ARR) of the investment in the new machine. Briefly explain what your result means. [4]

(c) Analyse the factors that JPB might have considered when deciding to operate a Just-In-Time production system. [6]

(d) Evaluate the impact of new technology on any **two** stakeholder groups of Round *plc*. [10]

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**The Akshay Company (TAC)**

The Akshay Company is a manufacturer of consumer electronic products, based in Europe. It supplies a range of products to retailers in Europe. The owners wish to expand the business. Current *capacity utilisation* is 98%. They are considering purchasing a factory in a developing country. The main benefit would be lower unit costs – both land and labour are cheaper than in Europe. *Legal constraints* on business activity are also different. The new factory will need well-motivated staff to be recruited and trained.

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The move would enable the business to supply the market in this region. It therefore needs to research the market in this region. TAC has decided to interview a sample of 1000 people.

Sales revenue since 1999 has grown by 40%. Ratio calculations based on TAC's accounts are shown in Table 1.

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**Table 1**

Year	1999	2000	2001	2002
Gross profit margin	60%	59%	59%	56%
Net profit margin	5%	6.2%	7%	8%
Return on capital employed	20%	23%	27%	?

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Results for 2002 were:

Sales revenue      \$500 million  
 Gross profit        \$280 million  
 Net profit            \$40 million  
 Capital employed   \$130 million

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**(a)** Define the following terms:

**(i)** Capacity utilisation (line 3) [3]

**(ii)** Legal constraints (line 5) [3]

**(b) (i)** Outline a suitable method of sampling for TAC. [3]

**(ii)** Explain whether secondary data might be useful to TAC in researching the market. [3]

**(c) (i)** Calculate the return on capital employed for 2002. [2]

**(ii)** Using your answer to **(c)(i)** and other data, analyse the performance of the business between 1999 and 2002. [6]

**(d)** Discuss the importance of Human Resource Management for the success of the new factory. [10]

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