UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Advanced Level		
BUSINESS STUDIES	9707/03	
Paper 3 Case Study	October/November 2005	
Additional Materials: Answer Booklet/Paper	3 hours	

### **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. You may use a soft pencil for any diagrams, graphs or rough working. Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A Answer all questions.

Section B Answer one question.

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. Candidates are advised to spend 40 minutes on Section B.

International Examinations

[Turn over

### **MERCARDO PLC**

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### The current situation

Mercardo plc manufactures a range of consumer electrical goods. It is best known for its washing machines and refrigerators. These are manufactured in four factories in the same country and are exported to over 30 countries worldwide. Flow production methods are used. The company is profitable and sales are expanding, helped by rising consumer incomes in most countries. This success has resulted in problems for the business that require important decisions to be made by the Board of Directors.

### **Organisational problem**

Mercardo plc was founded many years ago by a brilliant engineer called Jin Alves. He had controlled the business using an autocratic leadership style. When Jin retired his son, Bernie, took over and used the same leadership style. All of the 10 company's factories and other divisions - marketing, finance and research and development – operate under centralised control. All managers report to Head Office regularly and all major decisions have to receive central approval. This structure had real advantages when finances were limited and when junior managers lacked experience. Now that the company is very large and has sales 15 offices abroad, this centralised structure no longer seems appropriate. Bernie and his directors are thinking about introducing a decentralised management structure.

### **Capacity problem**

The existing factories have almost reached their production capacities. The Operations Director is concerned about operating labour and machines at nearly 20 100% of capacity. The two options for solving this problem are either to extend one of the existing factories (Option A) or to build a new one (Option B). If Option B is chosen the new factory could be located in another country. The Directors have recently discussed the advantages and disadvantages of moving some production to another country. The Finance Director has estimated future cash flows from the 25 two options and these are shown in Appendix A.

#### Quality problem

Although the company has been able to increase output, quality levels have fallen in recent months. There seem to be several possible reasons for this. Production staff are increasingly unhappy about the differences in pay between production workers 30 and all other staff. One union leader told a meeting of managers that "My production line workers earn 50% of the pay of the quality control inspectors who are employed to check their work - yet these inspectors do not even make anything! Workers could be organised into teams and made responsible for the quality of their own output." 35

All production staff are paid a low weekly wage plus a bonus for meeting output targets. All other staff in Mercardo, including the quality inspectors, are paid annual salaries. These salaries can be negotiated each year following interviews which review staff performance. The use of two very different pay systems is causing anger amongst the production workers.

### Financial efficiency problem

Rising profits have not led to improved cash flow for the business. The Finance Director has been worried about this for some time. She has gathered some recent accounting data to analyse the company's financial efficiency (Appendix B). She might have to improve the ways in which the company manages its working capital. 45 This might allow the business to reduce its high level of borrowing.

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### Pollution problem

One of Mercardo's factories uses very old equipment that leads to a great deal of smoke and much waste. Many residents have complained to Mercardo and to an environmental pressure group. The pressure group has suggested that the pollution levels are greater than the Government allows. Mercardo's Operations Director does not want to close the factory as it would lead to lost production. "Closing the factory would reduce our profits but also lead to job losses in this area of high unemployment" she said. She intends to replace the equipment when the company can afford it – perhaps in several years time.

### The future – new markets and new products will be needed

The company's main products are sold in markets that have almost reached maturity. Competition from other firms is high. The Board of Directors is keen to see the company research new products that will lead to future sales and profits growth. One of the products being considered is a new type of mobile phone (cell phone). The design of this phone allows it to be produced with a choice of features. These include a video camera, DVD player, internet access and safety alarm. Different features will appeal to different groups of consumers. The Marketing Director believes that these different features will allow effective segmentation of the mobile phone market in many different countries. The success of the phone will depend not only on technical features but also on its appearance and cost.

End of year	Option A – factory extension	Option B – new factory
0	(5.0)	(60)
1	2.5	40
2	2.5	30
3	2.5	30

## Appendix A – Forecasted Net Cash Flows \$m

10% discount factors: Year 1 0.91 Year 2 0.83 Year 3 0.75

# Appendix B – Accounting data for Mercardo plc. \$m

	30/9/2004	30/9/2005
Debtors	16	23
Stocks	120	180
Annual sales turnover (for year ending)	200	250

85

75

70

60

50

55

65

### Section A

### Answer **all** questions in this section.

- 1 Discuss the advantages and disadvantages for Mercardo plc of introducing a decentralised management structure. [12]
- 2 (a) Use Appendix A to calculate for both options:
  - (i) The Average Rate of Return.[4](ii) The Net Present Value (at 10% discount)[4]
  - (b) How useful might these results be to Mercardo's directors? [4]
  - (c) Assume that Mercardo decides to build a new factory. Evaluate the advantages and disadvantages to Mercardo of locating the factory in your country. [12]
- 3 (a) Calculate financial efficiency ratios for Mercardo plc using the data in Appendix B. [6]
  - (b) Evaluate any two ways in which the business might improve its financial efficiency. [8]
- 4 (a) Analyse how value analysis could assist in the development of the new mobile phone (cell phone). [6]
  - (b) Evaluate the marketing factors that could influence the sales success of the new phone. [12]
- **5** Discuss the external economic constraints that might limit the future success of this business. [12]

### Section B

Answer either question 6 or question 7 in this section.

- 6 Discuss whether Mercardo should continue to manufacture products from the factory that pollutes the local environment. [20]
- 7 Advise the management of Mercardo on the most appropriate ways to motivate production line workers.
  [20]

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