



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge International Level 3 Pre-U Certificate
Principal Subject

BUSINESS AND MANAGEMENT

9771/01

Paper 1 Business Concepts

May/June 2010

2 hours 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.
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 1

Answer **all** questions.
For each question there are four possible answers **A, B, C** and **D**.
Choose the one you consider correct and record your choice in the Answer Booklet.

Section 2

Answer **all** questions.

Section 3

Answer **one** question.

You are advised to spend 25 minutes on Section 1, 1 hour 20 minutes on Section 2, and 45 minutes on Section 3.

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.

This document consists of **10** printed pages and **2** blank pages.



Section 1: Multiple Choice

Answer all questions in this section.

You are advised to spend 25 minutes on the 20 questions in this section.

- 1 When an entrepreneur sets up a new business the opportunity cost to that individual is:
- A The profit or loss made in the first year of trading.
 - B The capital cost of setting up the business.
 - C The cost of the fixed assets needed by the business.
 - D The income that could have been earned from the best alternative.

No. of guests	Daily allocated fixed costs £	Total variable costs £
1	50	15
2	50	27
3	50	37
4	50	46
5	50	54

Table 1: Daily costs incurred by a bed and breakfast business.

- 2 From Table 1, which one of the following is true?
- A The marginal cost of the 4th guest is £9.
 - B The total daily cost of 5 guests is £229.
 - C The average cost of having 5 guests staying is £104.
 - D The business is experiencing diseconomies of scale.
- 3 Which one of the following would be classified as one of Herzberg's hygiene factors?
- A Job enrichment.
 - B Self actualisation.
 - C Pay.
 - D Feedback on performance from supervisors.

- 4 On a network (CPA) diagram, the duration of activity X is 23 days. The EST of this activity is day 56 and the LFT is day 83. What is the total float on this activity?
- A 4 days.
 - B 60 days.
 - C 27 days.
 - D 33 days.
- 5 Which one of the following could be a benefit of using e-commerce to sell a product?
- A There are no fixed costs involved.
 - B It eliminates the need for any transport costs.
 - C Consumers prefer face to face contact with sales staff.
 - D A wide geographical spread of customers can be reached.
- 6 Which one of the following is NOT a basis for market segmentation?
- A Demographic differences.
 - B Price discrimination.
 - C Different geographical regions.
 - D Psychographic factors.
- 7 One of the most likely consequences of an ageing population on the UK business sector, if the retirement age does not change, is:
- A A decrease in demand for all goods and services.
 - B An increase in the burden of taxation on firms and/or workers.
 - C A reduction in the average wage rate.
 - D A fall in demand for public transport.
- 8 One of the main uses of the standard deviation measure in interpreting statistical data, such as the amounts spent by motorists on car insurance, is:
- A To indicate the range between the highest and lowest value.
 - B To indicate the average (mean) amount spent.
 - C To indicate the average amount by which the median cost of car insurance differs from the mean value.
 - D To indicate the distribution of amounts spent when compared to the mean.

Sales revenue	£85m
Gross profit	£32m
Net profit after tax	£17m
Dividends	£13.6m
Shares issued	42.5m

Table 2: Extracts from the accounts of a limited company, 31/09/09.

- 9 Using Table 2, what was the dividend yield if the share price was £0.96?
- A 3.33%
- B 13.33%
- C 30.33%
- D 33.33%
- 10 Using Table 2, what was the Price Earnings (P/E) ratio if the share price was £0.96?
- A 0.4
- B 2.0
- C 2.4
- D 24
- 11 Which one of the following is NOT part of Porter's Five Forces model?
- A Suppliers power.
- B Government power.
- C Buyers power.
- D Entry threat.
- 12 Firm Y sold 10000 units @ £10 each last year. After raising the price by 5%, total sales revenue fell to £94500 this year. Based on this data, the price elasticity of demand is:
- A +2
- B +0.2
- C -0.2
- D -2

- 13 One of the arguments that could be used in support of an employee profit sharing scheme is:
- A It will motivate staff who are not interested in financial gain.
 - B Long term profitability could increase.
 - C Such schemes are a form of empowerment.
 - D Employees' security of income is increased.
- 14 When recruiting staff one of the claimed benefits of external recruitment is:
- A It is a cheaper form of recruitment than appointing internal staff.
 - B Another vacancy will be created that has to be filled.
 - C Existing staff will be reassured about their own promotion prospects.
 - D It is likely that there will be more applicants.
- 15 In which one of the following situations would the Bank of England be most likely to increase interest rates?
- A UK real GDP is decreasing.
 - B Cyclical unemployment is rising.
 - C The £ exchange rate against all major currencies is appreciating.
 - D The annual CPI inflation measure is above 3%.

	Budget 2009 £	Actual 2009 result £
Sales revenue	35m	32m
Material costs	2.3m	2.2m
Labour costs	3.5m	3.6m
Overheads	1.2m	1.0m

Table 3: Budgeted and actual data for Bright Glass Conservatories Ltd.

- 16 Using Table 3, what is this company's 2009 total profit variance?
- A £2.8m Adverse.
 - B £2.8m Favourable.
 - C £3.6m Adverse.
 - D £3.6m Favourable.

- 17 One of the potential consequences of outsourcing of production is:
- A Higher transport costs.
 - B Higher fixed costs.
 - C Higher employee costs.
 - D Higher self-sufficiency.
- 18 One of the potential limitations of the Average Rate of Return (ARR) method of investment appraisal is that:
- A No account is taken of the profit after the payback period.
 - B The adjustment for the time value of money is complex and time consuming.
 - C No account is taken of the initial investment cost.
 - D No account is taken of the fall in value of money over time.
- 19 The concept of 'divorce between ownership and control' is significant when:
- A A sole trader takes on a full business partner.
 - B 30% of the shares in a private limited company are sold to a private investor.
 - C A hairdresser, recently made redundant, sets up his own enterprise.
 - D A private limited company gains a listing on the Stock Exchange.
- 20 In May 2008 the Office of Fair Trading decided to refer the proposed merger between Air France and VLM airlines to the Competition Commission unless Air France agreed to sell off some peak time landing slots at London City Airport to other airlines. The most likely reason for this decision is to:
- A Make it difficult for the merged Air France/VLM company to fix prices.
 - B Reduce profits of the airlines concerned.
 - C Make cartels more likely at London City Airport.
 - D Reduce the chances of the airlines making a loss and cutting services to customers.

[Total: 20]

Section 2: Case Study

Answer all questions in this section.

You are advised to spend 1 hour 20 minutes on this section.

WarmIT plc

WarmIT has manufactured gas central heating boilers and radiators in the UK for 35 years. The demand for central heating systems is seasonal – but not in the way many expect. Most new central heating systems are fitted in the summer months. The pattern of sales in recent years is shown in Table A:

Year	Quarter	Sales Revenue £m	4 – period moving average	Moving average trend	Seasonal variation
2006	1	60			
	2	70	72.5		
	3	95	73.75	73.125	21.875
	4	65	76.25	75	-10
2007	1	65	80	78.125	-13.125
	2	80	83.75	81.875	-1.875
	3	110	83.75	83.75	26.25
	4	80	85	84.375	-4.375
2008	1	65	87.5	86.25	-21.25
	2	85	88.75	88.125	-3.125
	3	120	90	89.375	30.625
	4	85	88.75	89.375	-4.375
2009	1	70	86.25	W	Y
	2	80	83.75	X	Z
	3	110			
	4	75			

Table A: Moving average analysis of WarmIT's recent sales.

Reduced profit margins

The 2009 downturn in the UK economy was one of the causes of the declining profitability of the company. Sales fell but so too did the net profit margin as the company had not made cuts in overheads to reflect reduced demand. The Chief Executive, Asif Noon, was being pushed by major shareholders to take quick action to reverse these trends. Asif delegated the HR Director with the task of devising a new structure for the organisation that would cut overheads – mainly management costs – by up to 25%. Last month, at a Board of Directors meeting, the HR Director proposed the following changes: 30

- Delayer the organisation by removing or re-employing in less significant roles 15 middle managers – 50% of the total. 35
- Break up the hierarchical structure to increase delegation at lower levels in each division of the business – home heating systems, commercial boilers and system installation department.
- Pass down, to each of these three divisions, authority for their own cost and revenue budgets. This would help the company identify the major cost and profit centres of the business so management decision making would be better informed. 40

Increasing competition

The technology behind gas boilers and radiators has not changed radically for years but market trends, driven by the price of gas, are changing. This is most noticeable in other EU countries like Germany where renewable energy has a high market share. Some EU based firms are entering the UK market with the latest solar energy and heat pump systems. This poses a long term threat to WarmIT's position. At the recent Board meeting the Operations Director proposed a big increase in the company's Research and Development budget. 'This', he said, 'should be used to try to adapt solar power panels to operate with traditional radiators. These panels would not replace but supplement existing heating systems, possibly cutting fuel bills by 50%. Innovative products will be the only way to survive in a market shocked by oil and gas prices and squeezed by foreign competitors. Look at the figures I researched from our three potential German rivals. You can see that, compared to us, R & D seems to be effective.' 45

	2009 R & D budget (Euro values converted into £ at 31/09/09 exchange rate)	Number of patented innovations 2009
WarmIT	£ 2m	1
EuroHeat	£23m	15
EuroSolar	£34m	20
Enviroheat	£26m	6

55

60

Table B: Research and development spending and numbers of innovations patented.

Managing changes

Asif wanted to prepare the company for rapid and significant changes in the next few years. He concluded the Board meeting by saying: 'We have good staff-manager relationships and low labour turnover for a manufacturing business. However, we need people with vision and leadership qualities, prepared to accept challenges and come up with new ideas. Yet many of our staff, although loyal, still see a 'them and us' divide and their first allegiance is to the Trade Union not to the company. Leading and managing change will be my main priority – and that should satisfy our short-sighted investors!' 65

- 21 (a) Calculate the values for W, X, Y, Z in Table A. [4]
- (b) What would be a seasonally adjusted forecasted value for the 2nd quarter of 2010 if the extrapolated trend value is £84m and the average seasonal variation is – £2.3m? [1]
- (c) Briefly assess the value of the moving average technique of sales forecasting to WarmIT. [5]
- 22 Evaluate the extent to which a substantial increase in R & D spending by WarmIT would ensure its future competitiveness in the UK heating market. [10]
- 23 Assess the value of establishing a budgetary system for each of the three divisions of the company. [10]
- 24 The company is about to undergo substantial changes. Discuss how the directors of WarmIT might achieve effective change with the minimum of employee resistance. [10]

Section 3: Essay

Answer one question in this section.

You are advised to spend 45 minutes on this section. Relevant references to real world business examples will be expected.

- 25** In the 12 months to October 2008, the FTSE index of 100 leading shares fell by almost 40%. Discuss the significance of this for UK businesses. [40]
- 26** Discuss the view that the continued development of emerging economies such as those of China and India will result in more opportunities than threats for UK based businesses. [40]
- 27** Evaluate the case for and against a UK based manufacturing business relocating its operations to another country. [40]
- 28** 'The style of leadership and management used within a business has much less impact on its success than is generally thought to be true.' Discuss this statement. [40]

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