



**BUSINESS AND MANAGEMENT
HIGHER LEVEL
PAPER 2**

Friday 19 November 2010 (morning)

2 hours 15 minutes

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- Section A: answer one question.
- Section B: answer two questions.

SECTION A

Answer **one** question from this section.

1. Dan Electro

Dan Bowen is a sole trader who sells digital cameras directly to consumers. He owns an online business and all sales are processed electronically under the business name *Dan Electro*. The office, storage place and call centre are located together in an expensive and desirable city centre location.

Dan started the business three years ago by borrowing a considerable amount of money from a bank. He used his residential property as collateral* for the loan.

The cameras are bought and shipped from a reputable and reliable overseas supplier who charges a high price for good quality cameras and prompt transportation. Dan has to pay in advance for the cameras. *Dan Electro's* customers are very loyal and see their purchase as good value for money. Repeat purchases comprise a large percentage of *Dan Electro's* sales. Some customers have even indicated that they would pay a higher price for the cameras because of their quality and the good service he provides.

Dan is now worried about the forecasted rise in interest rates, inflation and an increase in online competition. *Dan Electro* may face some cash flow difficulties in the coming years. He is considering various strategies in order to prevent such possible cash flow difficulties.

Financial information for 2010 (all figures in US\$)

Fixed costs per year	
Rent	20 000
Marketing	4 000
Administration	5 000
Interest payments	1 000
Variable costs per camera	
Camera	135
Transportation	45
Direct labour	20
Price per camera	250

Dan is expected to sell 700 cameras in 2010.

* collateral: the borrower's property is offered to the lender as security if the loan is not paid back

(This question continues on the following page)

(Question 1 continued)

- (a) (i) Define the term *variable costs*. [2 marks]
- (ii) Identify **two** advantages for Dan of operating as a sole trader. [2 marks]
- (b) (i) Construct a fully labelled break-even chart for *Dan Electro* for 2010. Calculate and indicate the break-even point, the margin of safety and the projected profit at 700 cameras (*show all your working*). [7 marks]
- (ii) Calculate the number of cameras *Dan Electro* must sell in order to double the projected profit (*show all your working*). [2 marks]
- (iii) Calculate the price per camera that needs to be charged (at expected sales of 700 cameras) in order to double the projected profit (*show all your working*). [2 marks]
- (iv) Explain **two** possible limitations of the break-even model as a decision tool for *Dan Electro*. [4 marks]
- (c) Examine **two** possible strategies for *Dan Electro* to prevent cash flow difficulties. [6 marks]

2. BBT

BBT is a well-established small private limited company specializing in online education, based in the United States. The owner and founder, Mark Davis, currently owns 100% of the shares and enjoys complete freedom in the running of the company. The business employs three full-time staff who have been with the business for over six years.

BBT has enjoyed many years of expansion in the provision of online education. Mark owns the copyright for his patented software, which provides him with a unique selling point (USP). However, the copyright will expire in the near future. Moreover, several rival companies have recently established a presence in the online education market.

Mark has to raise finance to develop new educational software to maintain or improve his market position. His bank manager has refused to lend funds for the research and development (R&D) of the new software. He said “software has a short product life cycle, and your balance sheet has deteriorated”.

Mark’s accountant has just presented the following financial information for *BBT* as of 31 October 2010, which raised some working capital and liquidity issues.

Extract from the balance sheet for *BBT* for the year ended 31 October 2010

	US\$
Capital employed	X
Cash	2000
Creditors	Y
Debtors	28 000
Depreciation	1500
Fixed assets	30 000
Loan capital	0
Net assets	Z
Retained profit	8500
Share capital	2000
Short-term borrowing	0
Stock	0
Total (current assets)	30 000
Total (current liabilities)	48 000

(This question continues on the following page)

(Question 2 continued)

- (a) (i) Define the term *copyright*. *[2 marks]*
- (ii) Identify **two** disadvantages for *BBT* of operating as a private limited company. *[2 marks]*
- (b) (i) Calculate the missing figures X, Y, Z **and** with those figures and from the financial information provided, construct a complete balance sheet for *BBT* for 2010. *[7 marks]*
- (ii) *BBT's* net profit before interest and tax as at 31 October 2010 was US\$27 695. Calculate the value of *BBT's* current ratio **and** return on capital employed (ROCE). *[2 marks]*
- (iii) Using financial and non-financial factors, explain why the bank manager refused to finance the R&D of the new educational software. *[6 marks]*
- (c) Examine **two** possible alternative sources of finance that Mark might use to fund the R&D of the new educational software. *[6 marks]*

SECTION B

Answer **two** questions from this section.

3. The battle of the online search engines

The online search engine market doubled from US\$40 billion in 2008 to US\$80 billion by 2010. *Google*, with the largest market share, benefited most from this growth. An executive from *Microsoft*, a market rival, says that the industry will be better served by having an alternative to the dominance of *Google*.

Microsoft's objective is to quickly gain a bigger share of the online search engine market by external growth. After pursuing unsuccessful internal growth strategies, *Microsoft* launched a US\$45 billion hostile takeover bid for the search engine business *Yahoo!*.

Yahoo! has many other services, such as e-mail. However, because of its lack of focus, *Yahoo!* has fallen behind *Google*. *Yahoo!* recently suffered a decline in profit causing its shares to fall by 40%. As a consequence *Yahoo!* cut 1000 jobs.

If successful, *Microsoft's* takeover of *Yahoo!* will combine the second and the third largest companies in the online search engine market. This takeover would result in extensive job losses but also in cost savings of at least US\$1 billion. Moreover, the combination of the two companies' engineering resources and expertise would expand the research and development (R&D) capability to produce more innovative services.

The proposed takeover is likely to attract government investigation into the market share of the combined organizations. Together, *Microsoft* and *Yahoo!* would account for 35% of the online search engine market.

Yahoo! has so far been able to resist the takeover bid. *Microsoft* is now looking for alternative growth strategies such as mergers with other possible partners.

[Source: adapted from Dominic Rushe, *Where to?*, *The Sunday Times*, 10 February 2008 and Richard Waters, *Microsoft challenges Google's grip*, *Financial Times*, 2 February 2008]

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(Question 3 continued)

- (a) Define the following terms:
- (i) *market share* [2 marks]
 - (ii) *external growth*. [2 marks]
- (b) Draw The Boston Consulting Group (BCG) matrix for 2010 **and** distinguish between the position of *Microsoft's* online search engine and *Google's* online search engine. [6 marks]
- (c) Examine the possible effects that a successful takeover bid by *Microsoft* of *Yahoo!* would have on employees and **one** other stakeholder. [6 marks]
- (d) Discuss *Microsoft's* decision to launch a hostile takeover bid for *Yahoo!*. [9 marks]

4. World airlines are on alert

Over the last two decades two business models have emerged in the airline industry:

- budget airlines (also called “no frills” and “low cost”) that target price-conscious travellers who have a high price elasticity of demand
- full service airlines that target travellers with lower price elasticity of demand who are willing to pay a higher price for more comfort and on-board services.

With the global economic downturn the airline industry is suffering. Some airlines serving only business class passengers have gone into insolvency.

The chief executive officer (CEO) of *Ryanair*, a budget airline, argues that costs will increase for all airlines and that the lowest price operators are more likely to survive. Customers will try to save money wherever possible. Moreover, 25% of *Ryanair* passengers are business people who have adapted to the economic downturn by economizing. The period of expensive flights is over.

However, the CEO of *British Airways*, a full service airline, disagrees. He said that budget airlines can no longer offer cheap tickets due to increasing fuel costs. The unique selling proposition (USP) of budget airlines will disappear. In contrast, he said, 40% of *British Airways* customers are business passengers who have to keep flying. These passengers want high quality, highly differentiated and more expensive services. He believes that full service airlines are more likely to sustain their competitive advantage.

Some market analysts argue that if fuel costs cause ticket prices to go up, budget airlines will have the advantage over full service airlines because of their smaller size and operational flexibility.

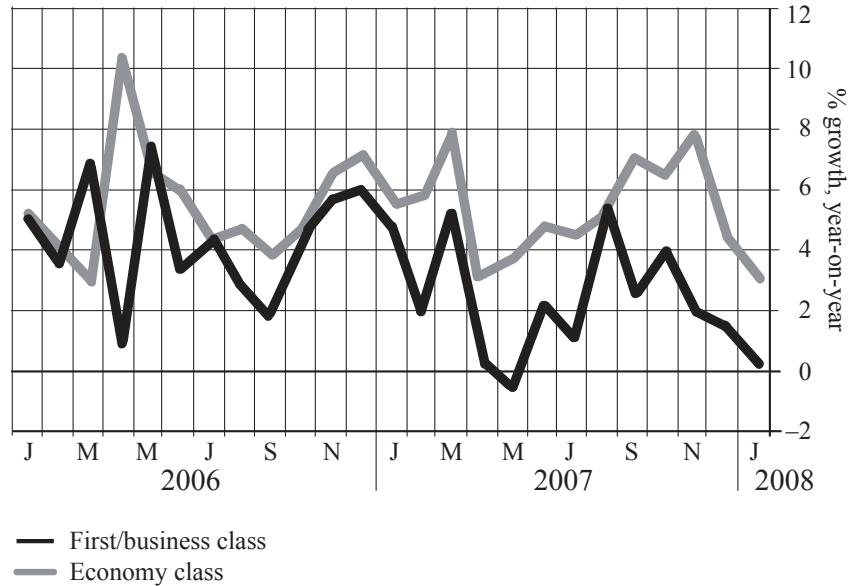
Information on elasticity:

- cross price elasticity of demand between airlines and other modes of transport (for example, car, train *etc.*): 0.5
- income elasticity of demand for air travel: 3
- price elasticity of demand for budget airlines: 1.9
- average price elasticity of demand for first, business and economy class tickets for full service airlines: 0.95.

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(Question 4 continued)

Passenger growth
Passenger traffic growth by ticket type



[Source: adapted from Suzy Jagger, *World airlines on alert as soaring oil prices set a course for recession*, *The Times*, 31 May 2008]

- (a) Define the following terms:
 - (i) *unique selling proposition (USP)* [2 marks]
 - (ii) *income elasticity of demand.* [2 marks]
- (b) With reference to Porter’s generic strategies model, distinguish between the competitive advantages of the **two** business models in the airline industry. [6 marks]
- (c) Examine the likely effects on the airline industry of cross price elasticity of demand **and** income elasticity of demand. [6 marks]
- (d) Discuss the claim made by the *British Airways* CEO “that full service airlines are more likely to sustain their competitive advantage”. [9 marks]

5. Bricko Group

Bricko Group is a Swedish company that sells its products in many countries around the world. It manufactures toys, with its best known product being the plastic building bricks known as “Bricko”. The company is a major employer in many Swedish towns. It takes pride in offering job security, generous benefits and a sense of family for its employees.

Bricko Group is now facing the following problems:

- increased competition in the toy market because other manufacturers can produce cheaper branded products
- increased competition from other sectors such as online gaming
- increased number of defective products
- stricter health and safety regulations in the European Union (EU)
- pressures from environmentalist groups in Sweden due to pollution from the production plants
- lack of innovation and failure to launch new products in the past few years.

In recent years *Bricko Group* has lost some of its market share. *Bricko Group*'s largest rival is *Peppa Toys*, which produces similar products. *Peppa Toys* has recently opened a new manufacturing plant that has doubled its production. Primary market research shows that *Bricko Group* has far better brand recognition but consumers prefer *Peppa Toys*' lower prices. The directors at *Bricko Group* believe that developing brand loyalty will be essential to maintain its competitiveness.

Quality assurance is an important aspect to *Bricko Group*, which is why the production manager wants to implement a Kaizen (continuous improvement) approach to manufacturing in Sweden. However, the financial manager is proposing to outsource the production facilities to Bangladesh so as to reduce costs. The research and development (R&D) department would remain in Sweden and would increase its activities.

- (a) Describe **one** advantage and **one** disadvantage of primary market research for *Bricko Group*. [4 marks]
- (b) Explain **two** benefits and **one** limitation of a Kaizen approach to manufacturing for *Bricko Group*. [6 marks]
- (c) Analyse the importance and role of branding for *Bricko Group*. [6 marks]
- (d) Discuss the financial manager's proposal “to outsource the production facilities to Bangladesh”. [9 marks]