



22115014



**BUSINESS AND MANAGEMENT
STANDARD LEVEL
PAPER 2**

Friday 20 May 2011 (morning)

1 hour 45 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.

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SECTION A

Answer **one** question from this section.

1. Informatic

Informatic manufactures computers and is based in Sri Lanka. *Informatic* uses a method of batch production and manufactures batches of computers according to customer specifications such as computer speed and screen size. Production workers are paid by the hour but receive a lower than average wage for Sri Lanka. To compensate they are offered long-term job security and other non-financial rewards.

Informatic exports 4000 computers a year to Pakistan using local independent distributors who have knowledge of the local market as well as experience in delivering and installing computers. 90% of *Informatic's* sales are organized through such distribution channels. Because using local independent distributors increases the final price of the computer to the customer, senior managers have decided to offer customers in Pakistan the opportunity to purchase computers directly from *Informatic*. Customers have to telephone orders to *Informatic* in Sri Lanka from Pakistan because e-commerce sales are not available.

The following are *Informatic's* expense and sales price figures:

- fixed costs of \$100 000 per year
- variable costs of 80% of the sales price
- sales price of \$1000 per computer.

- (a) (i) Define the term *batch production*. [2 marks]
- (ii) Identify **two** fixed costs for *Informatic*. [2 marks]
- (b) For *Informatic*:
- (i) calculate the break-even quantity in units (*show all your working*). [2 marks]
- (ii) calculate the margin of safety in units (*show all your working*). [2 marks]
- (iii) calculate the net profit if 4000 computers are sold (*show all your working*). [2 marks]
- (iv) prepare a fully labelled break-even chart. [5 marks]
- (c) Examine the effectiveness of the new distribution channel for *Informatic*. [5 marks]

2. British Airways (BA)

British Airways (BA) went from a record profit in 2008 to its biggest ever loss in 2009. Sales revenue dropped by 8% from US\$9863 million. The company identified three factors for this change:

- firstly, there was a fall in demand for its most important market segment: the business traveller
- secondly, the global banking crisis resulted in a dramatic increase in *BA*'s cost of borrowing
- finally, the aviation fuel bills, which make up the largest percentage of variable costs for *BA*, rose by 13%.

To address its financial problems, *BA* executives decided on several cost reduction methods. They will not award any pay increases. Managers will not receive any fringe payments. Furthermore, the airline imposed a retrenchment of 2500 jobs, resulting in a monthly labour cost saving of US\$180 million. Unions* have already complained about these cost reduction measures, and several workers and managers have also expressed their dissatisfaction. *BA* announced that it would be reducing the number of flights, and orders for five new planes have been cancelled.

There is, however, one piece of good news for *BA* passengers; the company announced that there will be no ticket price increases. "Demand has become so fragile that any increase in ticket prices would damage our sales revenue." The airline is now being forced into offering special deals; a position that was unthinkable only two years ago.

[Source: adapted from <http://www.guardian.co.uk/>, Guardian News and Media Limited 2009, 22 May 2009]

Table 1: selected items from *BA*'s profit and loss account for the year ended 30 April 2009 (US\$ millions)

Aviation fuel costs	3000
Cost of goods sold	X
Direct labour costs	2160
Dividends	0
Expenses	100
Gross profit	-120
Interest	180
Net profit after interest and tax	-400
Net profit before interest and tax	-220
Other operating costs	4034
Retained profit	-400
Sales revenue	9074
Tax	0

* unions: organizations of workers ("labour unions") that defend or safeguard workers' interests

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(Question 2 continued)

Table 2: selected items from *BA*'s balance sheet as at 30 April 2009 (US\$ millions)

Fixed assets	8142
Current assets	4508
Current liabilities	11 204
Loan capital	800
Retained profit	–400
Share capital	1046

(a) Define the following terms:

(i) *variable costs* [2 marks]

(ii) *retrenchment*. [2 marks]

(b) (i) Using the information in Table 1, calculate the cost of goods sold (figure X) and construct a profit and loss account for *BA* for 2009. [4 marks]

(ii) Using the information in Table 1 and Table 2, calculate the return on capital employed (ROCE) **and** net profit margin (NPM) for *BA* (*show all your working*). [4 marks]

(iii) Comment on your results from part (ii), using information from the stimulus material. [3 marks]

(c) Examine the impact of not awarding pay increases and managerial fringe payments for *BA*. [5 marks]

SECTION B

Answer **two** questions from this section.

3. Barreiro Leisure Complex (BLC)

Barreiro Leisure Complex (BLC) owns many cinemas and ticket sales to the cinemas have historically been *BLC’s* main source of revenue. However, the current economic recession has affected demand patterns for many leisure activities, including cinema attendances. *BLC’s* management decided to broaden its product range by creating the ultimate community gaming experience. At a cost of US\$280 000, *BLC* converted one of its small movie theatres into a large Wi-Fi (wireless) gaming area with 50 computer screens to allow *BLC* to offer “Cinegames”. Cinegames transforms individual game play into group play. The area also includes special effects such as fog, black light, flashing green lasers, high-definition digital projectors and vibrating seats.

BLC produced the following figures:

Cost of investment to convert one theatre to a Cinegames experience: US\$280 000.

End of year	Estimated revenue (US\$000s)
1	64
2	88
3	142
4	124
5	88

Market research revealed that a key market segment for the Cinegames experience was the male 18–30 year-old age group. The research also showed that leisure companies will need to offer a more varied product mix, not only to include different movies but also a range of products to cater for families. It was predicted that parents could go to watch a traditional movie while sons go to Cinegames and daughters go to other attractions.

Initial results of the launch of Cinegames were beyond *BLC’s* expectations. On the weekends crowding and traffic congestion was building up around the complex, putting pressure on local infrastructure. Despite increasing prices, *BLC* found that the Cinegames experience was starting to increase the attendances at some of its screenings for traditional movies watched by families. *BLC* started to consider the possibilities of transforming a second theatre into an additional Cinegames experience. However, a local community pressure group argued that *BLC’s* decision to convert one of its theatres was starting to impact considerably on the local environment.

[Source: adapted from <http://www.joystiq.com/2007/02/27/movies-theaters-to-become-arcades-of-the-future/>, 21 September 2009]

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(Question 3 continued)

- (a) Define the term *pressure group*. *[2 marks]*
- (b) (i) Calculate the payback period of Cinegames. *[2 marks]*
- (ii) Calculate the average rate of return (ARR) of Cinegames in the first five years of its operation. *[2 marks]*
- (iii) Comment briefly on your results from parts (i) and (ii). *[2 marks]*
- (c) Analyse the usefulness of market segmentation to *BLC*. *[5 marks]*
- (d) Discuss whether *BLC* should open a second Cinegames experience. *[7 marks]*

4. Dome Hospital in Ghana

Today, 13 000 nurses who were trained in sub-Saharan African countries such as Ghana work in Australia, the United Kingdom (UK), Canada and the United States (US). Recently, the UK has saved millions of US\$ in the cost of training UK nurses by recruiting Ghanaian ones. The government of Ghana, however, had spent a similar amount in training the same nurses who now work in the UK.

The migration of nurses is driven by workforce shortages in countries such as the US and the UK. Given these demographic changes, *Dome Hospital* in Ghana is experiencing severe difficulty in recruiting locally trained nurses.

Recruitment agencies in Ghana have tried a number of different methods to encourage Ghanaian nurses to come back home. They have used recruitment events and have set up a web site to attract nurses to fill vacancies. They also offer improved pay and working conditions, a free flight home and payment of moving expenses. *Dome Hospital* is considering the introduction of job enrichment schemes to increase non-financial motivation.

Dome Hospital has conducted primary research with Ghanaian nurses working in the UK and has discovered that they have encountered a lack of opportunities for experience and promotion.

Dome Hospital has been approached by *Afua*, a non-governmental organization (NGO), which is concerned about Ghanaian hospitals' ability to retain nurses. *Afua* is determined to help and is calling for changes in international law to reduce the mobility of nurses from developing to developed countries. *Afua* will probably offer *Dome Hospital* advice and guidance on recruitment and retention, but not direct funding. *Afua*, however, has considerable knowledge of other NGOs with financial resources.

[Source: adapted from <http://www.medicalnewstoday.com/articles/98545.php>, 21 September 2009]

- (a) Define the term *primary research*. [2 marks]
- (b) Explain **two** non-financial rewards that *Dome Hospital* could use to encourage Ghanaian nurses to stay in Ghana. [6 marks]
- (c) Analyse the likely benefits for *Dome Hospital* of *Afua*'s support. [5 marks]
- (d) Discuss the advantages **and** disadvantages of *Dome Hospital*'s recruitment strategy. [7 marks]

5. CMP

CMP offers financial accounting services to over 300 small businesses and is managed by Carl Mason. *CMP* employs three full-time accountants. The span of control is narrow; Carl has an autocratic leadership style. *CMP* has a productive working environment and a good reputation for its accurate accounting service.

In the current recession, 10 of *CMP*'s small business customers are closing down each month. *CMP* is losing revenue. Following a marketing audit and to replace this lost revenue, Carl is considering expanding *CMP*'s services to include accounting software installation and support (Option 1). As work patterns of an accounting business such as *CMP* fit poorly with the new services, *CMP* would have to change to more flexible working practices. Also, to make the market aware that *CMP* will offer these new services, Carl believes that *CMP* must consider use of above the line promotional methods, such as advertising in the business section of a daily national newspaper or having a billboard and a radio commercial. These promotional methods are expensive. An effective promotional strategy would probably cost at least US\$10000 every six months. However, Carl knows that above the line promotional campaigns are not always successful.

Another idea to replace lost revenue is to merge *CMP* with *Accounting Solutions (AS)*, a company already operating in accounting software installation and support (Option 2). *AS* is a private limited company wholly owned by Matt Auth. If the merger went ahead, *AS* would operate out of *CMP*'s current office space, reducing overheads of the combined businesses. Also, the new (combined) business could sell traditional accounting services to *AS*'s existing customers and accounting software installation and support services to *CMP*'s existing customers. *AS* already follows flexible work practices. Matt has a laissez-faire leadership style, to which his employees respond well. Carl and Matt are discussing combining the two businesses. Carl would own 55% and Matt 45% of the new business.

- (a) Outline what a marketing audit is. [2 marks]

 - (b) Explain **two** flexible working practices that would allow an accounting business, such as *CMP*, to offer an increased range of accounting services (Option 1). [6 marks]

 - (c) Analyse the appropriateness of an autocratic leadership style for *CMP*. [5 marks]

 - (d) Discuss the two options (Option 1 and Option 2) put forward by Carl to replace lost revenue. [7 marks]
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