

**Business and management**  
**Standard level**  
**Paper 2**

Friday 20 November 2015 (morning)

1 hour 45 minutes

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**Instructions to candidates**

- Do not open this examination paper until instructed to do so.
- Section A: answer one question.
- Section B: answer two questions.
- A calculator is required for this examination paper.
- A clean copy of the **business and management formulae sheet** is required for this examination paper.
- The maximum mark for this examination paper is **[60 marks]**.

## Section A

Answer **one** question from this section.

### 1. Calorie Count (CC)

Evana Dox has recently set up her own business, called *Calorie Count (CC)*. She has identified a precise market segment: local middle-aged people struggling to have a healthy lifestyle because of long working hours. Customers will order meals in the morning, and in the evening Evana will deliver the meals.

Evana is converting the ground floor of her house into a professional kitchen complying with all hygiene standards and food safety regulations. She will employ her niece Athena, a graduate from a catering college. 60% of the initial investment and start-up costs will come from Evana's personal savings; the other 40% will be financed by external sources.

Evana has carried out secondary market research and found that the net profit margin in catering businesses of the same size is 35%. However, for her new business Evana knows that her net profit margin will be much lower.

For her first year of operations, she aims for a net profit margin of 15%. In the first year, she hopes to sell an average of 50 meals per day, 5 days per week. She estimates that each meal would be sold at an average price of \$17. This price, Evana believes, will be competitive and will generate an adequate contribution per meal for her business to be successful.

CC uses a cost-based pricing strategy, with the following estimated costs:

- variable cost per meal: 70% of selling price
- fixed cost per annum: \$42 000.

- (a) Identify **two** variable costs for CC. [2]
- (b) Define the term *contribution*. [2]
- (c) Calculate for CC:
- (i) the break-even level of output (*show all your working*); [2]
- (ii) the margin of safety, if it sells 50 meals per day, 260 days per year (*show all your working*); [2]
- (iii) the profit **or** loss, if it sells 50 meals per day, 260 days per year (*show all your working*). [2]
- (d) Construct a fully labelled break-even chart, to scale, for CC. [5]
- (e) Analyse the appropriateness of a cost-based pricing strategy for CC. [5]

## 2. Bip Bip (BB)

Nicolás and Laura want to start up a vehicle rental business in Punta del Este, a seaside resort in the Southern Hemisphere. The business will operate as a partnership and will be called *Bip Bip (BB)*. Tourism is very high during the summer months (December to February in the Southern Hemisphere); the beach and water sports attract many tourists. *BB* will rent out convertible cars, electric cars and minivans. *BB* will purchase these vehicles through a leasing scheme.

“Because most rental income will occur in a few months in a year, we must forecast our cash position during the slow months,” says Laura. She has forecasted the following figures for the first six months of operation, beginning in December 2015. All revenues received and costs paid will be in cash. All cash sales are paid at the time of the vehicle rental.

	\$
Monthly revenue from rentals: December 2015 to February 2016	11 000
Monthly revenue from rentals: March to May 2016	1000
Monthly overheads starting in December 2015	2000
Leasing fee for all vehicles, payable by <i>BB</i> every other month starting in December 2015	5000
Monthly variable costs: December 2015 to February 2016	1500
Monthly variable costs: March to May 2016	300
Opening balance in December 2015	1000

Due to the increasing importance of e-commerce, Nicolás is considering whether *BB* should offer an online booking service through their website. Some of *BB*'s competitors have online booking, but many have chosen not to offer this service.

- (a) Identify **two** possible sources of finance, **other than** leasing, that *BB* might use to obtain the vehicles. [2]
- (b) Identify **two** features of a partnership. [2]
- (c) (i) Prepare a monthly cash-flow forecast, for *BB*, for the first six months of operation. [6]
- (ii) Comment on *BB*'s forecasted cash-flow position. [3]
- (iii) Calculate *BB*'s forecasted net profit for the first six months of operation (*show all your working*). [2]
- (d) Analyse the advantages **and** disadvantages, for *BB*, of using an online booking service. [5]

## Section B

Answer **two** questions from this section.

### 3. Mercy Ships (MS)

*Mercy Ships (MS)* is a non-profit organization that operates the largest non-governmental hospital ship in the world: the *Africa Mercy*. With the *Africa Mercy*, *Mercy Ships* provides free healthcare and other medical services.

Each year, *Mercy Ships* undertakes thousands of surgical and dental procedures and community health projects. Before the *Africa Mercy* arrives at a port, *Mercy Ships* uses brochures aimed at local people to promote its services. *Mercy Ships* also treats patients at dental clinics away from the port itself.



Everyone on the *Africa Mercy* is a volunteer. To keep the ship in operation, it requires a staff of 400 volunteers, including doctors and nurses as well as chefs, engineers, hair stylists, and many other people from different professions. People volunteer for varying lengths of time and must apply for available positions. *Mercy Ships* volunteers agree to follow a strict code of conduct and also pay a fee to participate. Volunteers include young people before they begin their professional life, middle-aged people who want a career break, and older people who want to remain active and make a difference. All volunteers believe in *Mercy Ships*' vision statement to "become the face of love in action, bringing hope and healing to the poor".

[Source: [www.mercyships.org](http://www.mercyships.org)]

- (a) Identify **two** ways non-profit organizations differ from profit-based organizations. [2]
- (b) Explain **two** elements of *MS*'s marketing mix **other than** product, price, place and promotion. [6]
- (c) Apply **one** theory of motivation to *MS*'s volunteers. [5]
- (d) To what extent does *MS* face challenges in its workforce planning? [7]

#### 4. OneWorld

*OneWorld* is an artistic and cultural centre in England, United Kingdom (UK). Founded in 1979, it organizes events, meetings and exhibitions in order to achieve its vision statement: “In our multicultural society today, all religious and ethnic communities will know and respect one another”. Last month, for example, it organized celebrations for Diwali (the Indian “festival of lights”), a series of lectures entitled “Unity and Diversity” and an exhibition of photographs called “Traditional Christmas in Poland”. The exhibition proved very popular, especially after it featured in a television news documentary about Polish migrants in England.

*OneWorld* is a non-profit organization with three sources of income:

- donations (from sponsors, such as local businesses)
- sale of tickets to some events (exhibitions are usually free, but *OneWorld* charges a small fee for the lectures)
- funding from the public sector.

Each source contributes approximately one third to *OneWorld's* income. However, following the global economic downturn beginning in 2008, contributions have reduced. In addition, funding from the public sector may disappear after the next government elections: one major political party has announced funding cuts to artistic and cultural centres. For *OneWorld* this change means less income, but more independence from the government.

The directors of *OneWorld* have recently appointed a marketing officer, Rajesh Singh. They gave him several tasks: formulating marketing objectives for *OneWorld*, preparing a promotional mix, developing marketing strategies, and using new forms of social media more effectively. *OneWorld* has a vision statement, but no mission statement. Rajesh first wants to write a mission statement for *OneWorld*.

- (a) Define the term *promotional mix*. [2]
- (b) Explain **two** types of below the line promotion that Rajesh could use for *OneWorld*. [4]
- (c) Formulate a mission statement for *OneWorld*. [2]
- (d) Analyse the role of mission statements **and** vision statements for an organization such as *OneWorld*. [5]
- (e) Evaluate the impact of changes in external factors on *OneWorld*. [7]

## 5. Le Bon Chocolat (LBC)

*Le Bon Chocolat (LBC)* owns a small chocolate factory located in Bayonne, a French city near the Spanish border. *LBC* is a family business founded in 1946 by Michel Lalanne, who operated it as a sole trader. Since 1980, *LBC* has been a private limited company. All shareholders are members of the Lalanne family.

*LBC* manufactures most of its chocolates in a flow production process. Some special orders, however, are made through batch production (for example, sugar-free Christmas chocolates, or egg-shaped Easter chocolates).

*LBC* employs a local accountant to prepare the company's financial statements. The following table shows his calculations for last year:

	<i>LBC</i>	Industry average
Net profit margin (%)	16	14
Current ratio	1.8	1.8
Acid test (quick) ratio	0.8	1
Stock turnover (in days)	24	18

*LBC* sells its chocolates directly to customers, through a well-known shop in the city centre. The accountant, however, recommends that *LBC* add a new channel of distribution. The Lalanne family is considering two options:

- (Option A) sell *LBC* chocolates in small independent shops in the region, through wholesalers.
- (Option B) sell *LBC* chocolates online, that is, business-to-customers (B2C) e-commerce.

- (a) Identify **two** features of a private limited company. [2]
- (b) With reference to *LBC* and to other examples of your choice, compare flow production **and** batch production. [6]
- (c) Interpret the financial calculations provided by *LBC*'s accountant in the table above. [5]
- (d) Recommend to the Lalanne family whether they should choose **Option A** or **Option B**. [7]
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