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# Business management

## Higher level

### Paper 2

1 May 2023

Zone A afternoon | Zone B morning | Zone C morning

2 hours 15 minutes

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#### Instructions to candidates

- Do not open this examination paper until instructed to do so.
- A clean copy of the **business management formulae sheet** is required for this examination paper.
- Section A: answer one question.
- Section B: answer two questions.
- Section C: answer one question.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[70 marks]**.

### Section A

Answer **one** question from this section.

**1. Call it Magic (CIM)**

*Call it Magic (CIM)* is an online jewellery store that sells silver earrings. It has completed its first year of trading, during which it sold 1000 pairs of earrings. *CIM*'s selling prices are low compared to those of other jewellery stores. The average unit cost per pair of earrings is \$5, and overhead costs are already at a minimum level.

**Table 1: Selected financial information for *CIM* for the year ended 31 December 2022**

|                                    |           |
|------------------------------------|-----------|
| Cost of goods sold                 | <b>X</b>  |
| Debtors                            | \$100     |
| Dividends                          | \$500     |
| Expenses                           | \$500     |
| Gross profit                       | \$7000    |
| Interest                           | \$0       |
| Net profit after interest and tax  | \$5850    |
| Net profit before interest and tax | <b>Y</b>  |
| Net profit before tax              | \$6500    |
| Retained profit                    | \$5350    |
| Sales revenue                      | <b>Z</b>  |
| Stock                              | 800 pairs |
| Tax                                | \$650     |

- (a) State **two** problems that a new business might face. [2]
- (b) Using relevant information provided above and in **Table 1**:
  - (i) calculate *CIM*'s cost of goods sold, **X**, in 2022 (*show all your working*); [2]
  - (ii) calculating **Y** and **Z**, construct a profit and loss account for *CIM*, for 2022; [3]
  - (iii) calculate *CIM*'s net profit margin (*no working required*). [1]
- (c) Explain **one** strategy *CIM* could use to improve its net profit margin. [2]

**2. Urban Express (UE)**

*Urban Express Ltd. (UE)*, a private limited company, owns and operates city buses in an economically unstable country. Interest rates are forecasted to increase in the next few years. The government of the country has approached *UE* to set up a public-private partnership (PPP) to purchase electric buses. *UE* has forecasted the following annual net cash flows for *UE*'s first purchase of electric buses.

**Table 2: Forecasted annual net cash flows for *UE*'s first purchase of electric buses**

| Year | Net cash flows (\$000)          |
|------|---------------------------------|
| 0    | -5000                           |
| 1    | 2200                            |
| 2    | 1800                            |
| 3    | 2400                            |
| 4    | 1100 (including residual value) |

**Table 3: Discount rates at 8 %**

| Year | Discount rate |
|------|---------------|
| 1    | 0.9259        |
| 2    | 0.8573        |
| 3    | 0.7938        |
| 4    | 0.7350        |

- (a) State **two** features of a public-private partnership (PPP). [2]
- (b) Using **Table 2**, for *UE*'s first purchase of electric buses, calculate:
  - (i) the average rate of return (ARR) (*show all your working*); [2]
  - (ii) the payback period (*show all your working*). [2]
- (c) Using **Table 2** and **Table 3**, calculate the net present value (NPV) at a discount rate of 8% (*show all your working*). [2]
- (d) Explain **one** factor that may have influenced *UE*'s choice of the discount rate of 8%. [2]

**Turn over**

## Section B

Answer **two** questions from this section.

### 3. Dean West Tutoring (DWT)

Dean West was an International Baccalaureate (IB) business management teacher in a developing country (country X). He also offered private tuition to students in need of additional support. Five years ago, he decided to leave teaching and set up *Dean West Tutoring (DWT)*.

*DWT* has grown in the last five years and now employs ten tutors offering face-to-face tuition in a range of IB subjects. The tutors work part-time. *DWT* takes a percentage of the fees that students pay for the tutoring. To establish positive branding for *DWT*, Dean expects all tutors to follow a strict code of conduct. He also reviews each tutor's performance and student feedback every week. Some tutors are feeling demotivated.

With the worldwide growth of online learning in the last few years, Dean saw an opportunity to expand *DWT*. He discovered a large market in Asia, particularly in China. Online one-to-one tuition in Asia is charged at an hourly rate that is three times higher than that usually charged in country X. *DWT* would need to hire agents in Asia to find potential students who want to learn online.

As the new school year is starting soon in China, Dean will need to act quickly. He is considering drawing up a Gantt chart to assist his planning.

However, *DWT*'s existing tutors are concerned about the expansion due to their lack of experience and equipment for online tutoring.

Dean is now considering two options to ensure that *DWT* has enough suitable tutors for expansion to online tuition:

- **Option 1:** Offer training and support to the existing tutors.
- **Option 2:** Recruit new tutors from anywhere in the world with online teaching experience.

- (a) Define the term *branding*. [2]
- (b) Explain **one** advantage **and one** disadvantage for *DWT* of expanding into online tuition in Asia. [4]
- (c) Explain **one** advantage **and one** disadvantage for Dean of drawing a Gantt chart to assist his planning for the expansion to online tuition. [4]
- (d) Recommend whether Dean should choose **Option 1** or **Option 2** to ensure that he has enough tutors for the expansion to online tuition. [10]

#### 4. Les Amis PLC (LA)

*Les Amis PLC (LA)* is a public limited company that sells casual clothes for men. Its target market is high-income professionals who value a personalized sales service. *LA* has developed brand awareness and operates 42 shops around the country. It owns 10 of these shops and leases the remaining 32. *LA* employs 950 people, who receive a higher wage than the industry average. *LA* also pays commission to sales staff working in the shops. *LA*'s organizational culture values the wellbeing and needs of its employees. Labour turnover is very low.

Recently, *LA* launched an online shop. Since then, online sales have increased considerably, while sales in *LA*'s physical shops have fallen. Shareholders want *LA* to close all its physical shops and sell online only. However, many of the employees will be made redundant if the physical shops are closed.

*LA*'s current chief executive officer (CEO), Marie Brossard, has a democratic leadership style, and she regularly meets with employees and encourages feedback. *LA*'s managers and employee representatives have never had a conflict. Marie plans to discuss the shareholders' desire to close *LA*'s physical shops with all the shop managers.

Customer returns of clothing orders at *LA* have increased substantially. Most returns are from online customers unfamiliar with *LA*'s clothing sizes. Marie has consulted the e-commerce department on how to reduce the increasing cost of returns, and they have suggested investing in expensive software that will enable online customers to find their correct clothing size.

- (a) Define the term *target market*. [2]
- (b) Explain **one** advantage **and one** disadvantage for *LA* of paying commission to sales staff working in its shops. [4]
- (c) Explain **one** advantage **and one** disadvantage for *LA* of Marie's democratic leadership style. [4]
- (d) Discuss whether *LA* should close all its physical shops and sell only online. [10]

## 5. RUZMA Coffee Ltd. (RC)

*RUZMA Coffee Ltd. (RC)*, a private limited company, owns a national chain of coffee booths<sup>1</sup>. It is known for its process innovation and its excellent and consistent quality of coffee. As part of its corporate social responsibility (CSR) objectives, *RC* buys large quantities of fair trade<sup>2</sup> organic coffee from producers.

Two years ago, *RC* began to replace employees with robots. *RC*'s long-term objective is to have booths served entirely by robots. Until this objective is met, *RC* has cut dividend payments to shareholders. *RC* uses a price-skimming strategy whenever it replaces an employee with a robot.

Many consumers are excited about the novelty of *RC*'s robots. However, a recent economic downturn and increasing protests against businesses that replace employees with robots have affected *RC*'s reputation and sales. *RC* is thinking of boosting its ethical objectives. For every employee replaced by a robot, *RC* plans to offer enhanced redundancy (unemployment) payments and a \$2000 grant towards future training.

Other national coffee chains have started to use the same process innovation as *RC*. Although *RC* has a high gross profit margin and the market is expected to grow, some directors remain worried about future dividends.

Recently, a worldwide coffee chain, *Coffee Extra (CE)*, unexpectedly offered to buy *RC* and is willing to pay twice its value. *CE* is known for delivering coffee via drones. *CE* attracts bad publicity because of the low salaries paid to its employees and their poor working conditions.

*RC*'s board of directors is not sure whether they should accept *CE*'s offer.

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<sup>1</sup> booths: stands/kiosks

<sup>2</sup> fair trade: trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers

- (a) Define the term *process innovation*. [2]
- (b) Explain **one** advantage **and one** disadvantage for *RC* of using a price-skimming strategy for the coffee sold in booths served by robots. [4]
- (c) Explain **one** advantage **and one** disadvantage for *RC* of setting ethical objectives. [4]
- (d) Recommend whether *RC* should accept *CE*'s offer. [10]

### Section C

Answer **one** question from this section. The organizations featured in sections A and B and in the paper 1 case study may not be used as a basis to your answer.

6. With reference to an organization of your choice, discuss the ways in which **globalization** can influence marketing **strategy**. [20]
  
7. With reference to an organization of your choice, examine the impact of **ethics** and **innovation** on operations management. [20]
  
8. With reference to an organization of your choice, discuss the ways in which **culture** and **change** can influence human resource management. [20]

*Companies, products, or individuals named in the stimuli are fictitious and any similarities with actual entities are purely coincidental.*

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