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Business management
Higher level
Paper 2

2 May 2025

Zone A morning | **Zone B** morning | **Zone C** morning

Candidate session number

1 hour 45 minutes

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Instructions to candidates

- Write your session number in the boxes above.
- 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 all questions.
- Section B: answer one question.
- Answers must be written within the answer boxes provided.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[50 marks]**.



Section A

Answer **all** questions in this section. Answers must be written within the answer boxes provided.

1. Hot Chips (HC)

Hot Chips (HC) manufactures potato chips (crisps), which it packages into bags. *HC* keeps costs low by purchasing second-hand (used) fryers to cook the chips. *HC*'s employees work on a flexi-time basis.



HC uses the straight-line depreciation method for its fryers. **Table 1** shows selected financial information for one fryer for 2025.

Table 1: Selected financial information for one fryer for 2025

Cost	\$1 000 000
Residual value	\$160 000
Useful life	4 years

HC's fryers operate continuously at full capacity. As customer demand has grown recently, *HC* has been advised to use the units-of-production depreciation method.

In 2025, *HC*'s forecasted production of bags of potato chips is 120 000. The forecasted total number of bags of potato chips (units produced) over the next four years is 600 000.

Increasing competition in the potato chip market has forced *HC* to consider introducing a customer loyalty programme. *HC* could benefit from the database created by this programme.

(a) State **two** features of flexi-time working.

[2]

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(This question continues on the following page)

(Question 1 continued)

(b) Using **Table 1**:

(i) calculate the annual straight-line depreciation expense for **one** fryer for 2025
(*show all your working*); [2]

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(ii) calculate the annual depreciation expense for **one** fryer for 2025 using the units-
of-production method (*show all your working*). [2]

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(c) Using your calculation in (b)(i), calculate the net book value of **one** fryer after two years
of purchase (*show all your working*). [2]

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(d) Explain **one** advantage for *HC* of introducing a customer loyalty programme. [2]

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2. Qwest Ltd.

Qwest Ltd. (Qwest) manufactures doors with a defect rate of 2%.

Table 2 shows selected financial information from Qwest’s 2024 statement of financial position (balance sheet).

Table 2: Selected financial information from Qwest’s 2024 statement of financial position (all figures in \$000s)

Current liabilities	200
Non-current liabilities	400
Retained earnings	500
Share capital	1500

Forecasted financial information for Qwest for 2025 is given in Table 3.

Table 3: Forecasted financial information for Qwest for 2025

Forecasted number of doors sold	40 000
Sales price per door	\$100
Total costs	\$3 700 000
Total fixed costs	\$300 000

Qwest recently received a new order for 5000 doors to be delivered in four weeks. Qwest’s usual lead time is eight weeks.

Qwest has two solutions for the new order:

- Make the 5000 doors and offer overtime to employees. Overtime pay would increase variable cost by \$5 per door. Total fixed costs allocated to make this option would be \$25 000.
- Buy the 5000 doors from another supplier to re-sell. Each door would cost \$86.

(a) Define the term *defect rate*.

[2]

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(Question 2 continued)

- (b) Using relevant information from **Table 2**, calculate Qwest’s gearing ratio for 2024
(*show all your working*). [2]

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- (c) Qwest decides to accept the new order for 5000 doors to be delivered in four weeks.

- (i) Calculate the cost to Qwest if it makes the 5000 doors (*show all your working*). [3]

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- (ii) Calculate the cost to Qwest if it buys the 5000 doors from another supplier
(*no working required*). [1]

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(Question 2 continued)

- (d) *Qwest's* raw material supplier is increasing prices by 10% in 2026. Explain **one** impact on *Qwest*.

[2]

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3. Dream Toys PLC (DT)

Dream Toys PLC (DT) produces model airplanes for teenagers and adults. DT uses cradle-to-cradle design and manufacturing.

Recently, new competitors have negatively impacted DT's sales.

DT wants to update its brand image and increase sales revenue. It is considering two options:

- **Option 1:** Add extra features, such as remote radio control and positioning location trackers, to its competitively priced airplanes.
- **Option 2:** Produce airplane virtual reality (VR) simulators, which would provide life-like experiences of flying old-fashioned and combat airplanes.

Table 4 shows selected financial information for both options.

Table 4: Selected financial information for Option 1 and Option 2 for 2025

	Net predicted outcome (\$ m)	Forecasted cost (\$ m)	Probability	Outcome (\$ m)
Option 1 (add extra features)	X	6	Success 0.6	8
			Great success 0.4	13
Option 2 (produce VR simulators)	0.2	10	Success 0.7	6
			Great success 0.3	20

(a) State two features of cradle-to-cradle design and manufacturing. [2]

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(Question 3 continued)

- (b) Using **Table 4**, calculate the net predicted outcome, **X**, for **Option 1** (*show all your working*).

[2]

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- (c) Using **Table 4**, construct a fully labelled decision tree **and** identify the best option for **DT** (*show all your working*).

[4]

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(Question 3 continued)

(d) Explain **one** disadvantage for *DT* of setting competitive prices for its model airplanes. [2]

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Section B

Answer **one** question from this section. Answers must be written within the answer boxes provided.

4. Very Mochi (VM)



Very Mochi (VM) is a Japan-based manufacturer of mochi, traditional Japanese desserts made of rice flour. *VM* mass produces mochi with strawberry or mango paste fillings.

VM's chief executive officer (CEO), Asai Kimura, believes that employees are key to *VM*'s success. Employees at *VM* undergo intensive training and receive excellent salaries, performance-related pay (PRP) bonuses, and fringe payments. *VM* has a continuous improvement (kaizen) approach. All 500 employees work in teams and meet regularly to discuss quality improvements. According to Hofstede's cultural dimensions, Japan has a very collectivist culture.

(a) State **two** features of continuous improvement (kaizen). [2]

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VM uses expensive, premium-quality fresh ingredients that spoil (go bad) quickly. *VM* has no warehouse and does not buy ingredients in bulk. *VM* uses ingredients immediately upon arrival. Once the mochi are finished, they are distributed. *VM* uses just-in-time (JIT) production and has few reliable suppliers.

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Turn over

(Question 4 continued)

- (b) Explain **one** advantage **and one** disadvantage for *VM* of using just-in-time (JIT) production.

[4]

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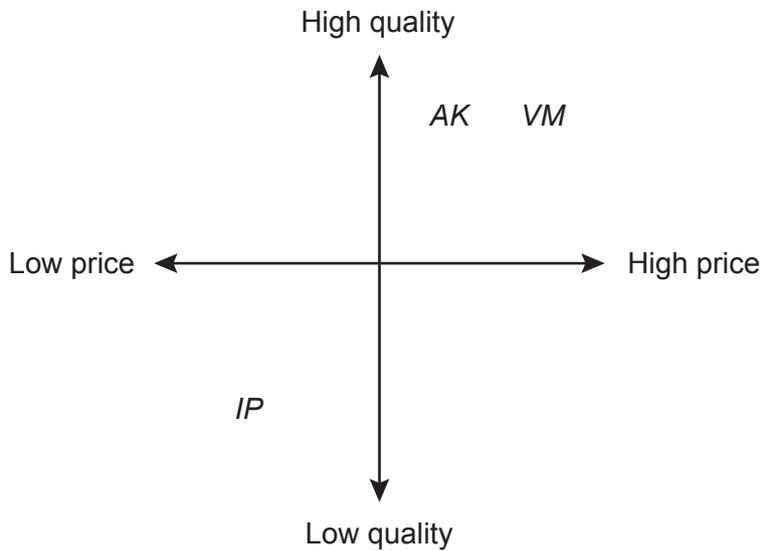
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The demand for mochi in Japan is seasonal and peaks during traditional festivals. The mochi market is highly competitive and dominated by three brands: *AK*, *IP* and *VM*. *VM* uses cost-plus (mark-up) pricing but is switching to dynamic pricing. Consumer trends are changing, so *VM* has conducted market research to find out how consumers perceive its quality and price. The findings of the market research are show in **Figure 1**.

Figure 1: Positioning map for the mochi market



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(Question 4 continued)

(c) With reference to **Figure 1**, comment on the market research findings for *VM*. [2]

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(d) Explain **one** advantage for *VM* of using dynamic pricing. [2]

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Recently, a miscalculation of strawberry filling quantity and a machinery breakdown delayed the delivery of 3000 mochi. *VM*'s brand image suffered. Asai wants to introduce new equipment with internet-of-things technology. This equipment would also gather data to monitor employees' productivity and health and would report the data in real time to *VM*'s management; it would also reduce employee mistakes.

Asai has gathered information to compare the capabilities and requirements of the new equipment with those of *VM*'s current equipment. The comparison is shown in **Table 5**.

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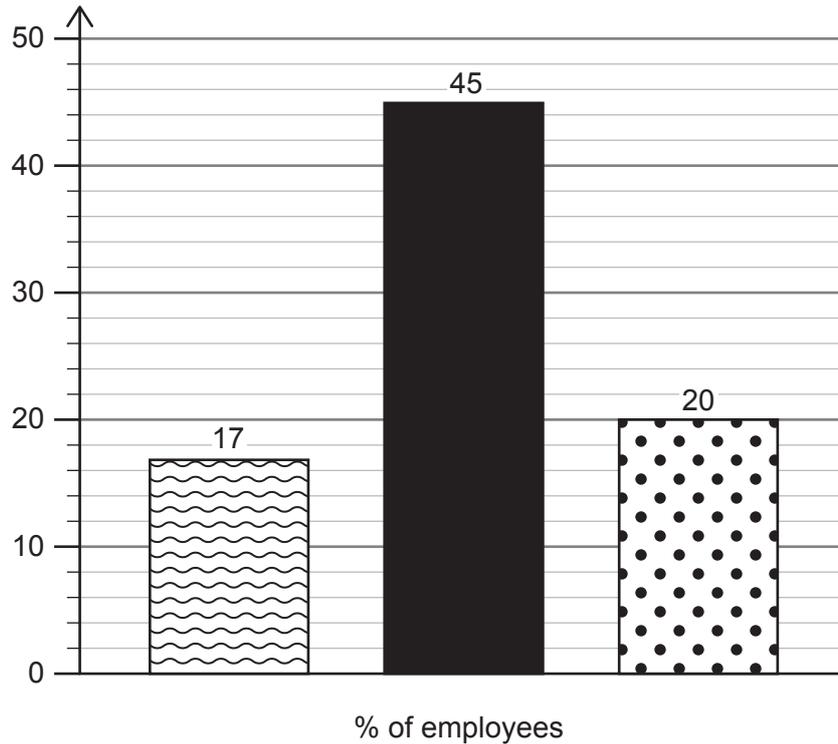
(Question 4 continued)

Table 5: Capabilities and requirements of VM's equipment

	Current equipment	New equipment
Mochi produced per hour	Up to 1000	Up to 1300
State of equipment	Not available	Reports maintenance needs and failures
Production process	Not available	Indicates ingredient levels
Production quality	Not available	Weighs and shapes mochi
Internet connection	Not available	Required to operate
Operating workers	Not available	Monitors productivity, body temperature, and heart rate

Asai announced that with the new equipment, performance-related pay (PRP) bonuses would be determined by personal productivity rather than team productivity. He conducted an employee survey, selected results of which are shown in **Figure 2**.

Figure 2: Selected results from VM's employee survey



Key:

-  Prefer personal PRP bonuses to team bonuses
-  Agree to be monitored and measured
-  Agree to provide health data

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5. AC Continental (AC)

Air Continental (AC) became the largest airline in its home country after a successful merger with a smaller airline, Bluesky Carrier (BC). However, AC is facing increased competition, declining demand, and rising operating costs, such as fuel and labour. Labour costs are significant in the airline industry and are one of the few costs that airlines can reduce easily. Cabin crews* are the largest part of an airline’s workforce.

(a) Define the term merger. [2]

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In 2023, AC suffered a loss before tax of \$500 million. AC’s cabin crews, facing rising living costs, nevertheless received wages above the industry average. In 2024, however, AC’s board of directors, without consultation, cut wages by 15% and changed working conditions by reducing cabin crews by one employee per flight. The board also decided to reduce employee benefits, including health insurance and life insurance, in 2025.

(b) Explain two sources of stakeholder conflict at AC. [4]

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AC employs 15 000 people in its cabin crews. Twelve years ago, strike action caused only 1% of flight cancellations. This low percentage was because cabin crew employees were members of multiple unions, many of whom refused to strike. However, because of a single-union agreement, all AC’s cabin crews became members of the trade union FIST. The cabin crew employees voted in favour of industrial democracy in response to the board’s decision, an eight-day strike took place. AC had to cancel 98% of its flights.

* cabin crew: members of an aircraft crew who attend to passengers

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(Question 5 continued)

(c) Explain **two** disadvantages for AC of having a single-union agreement with its cabin crews.

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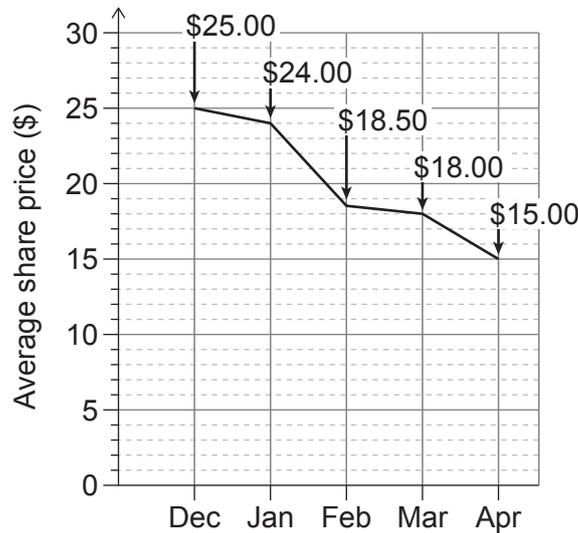
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AC's board of directors responded to the strike by:

- removing fringe payments for cabin crew employees
- hiring airplanes and cabin crews from other airlines
- replacing the striking cabin crews with employees refusing to strike.

The estimated cost of AC's response to the strike was \$50 million. Shareholders are closely monitoring changes in AC's share price, which are shown in **Figure 3**.

Figure 3: Changes in AC's share price in 2025



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24EP19

Turn over

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References:

1. FuatKose, 2009. *Chips spilling out of an open bag - stock photo*. [image online] Available at: <https://www.gettyimages.co.uk/detail/photo/chips-spilling-out-of-an-open-bag-royalty-free-image/174634598> [Accessed 29 July 2024]. Source adapted.
4. vasilybudarin, 2019. *Multi-colored Japanese ice cream Mochi in rice dough and Jasmine flowers on a concrete blue background*. Traditional Japanese dessert on a black slate - stock photo. [image online] Available at: <https://www.gettyimages.co.uk/detail/photo/multi-colored-japanese-ice-cream-mochi-in-rice-royalty-free-image/1158085114> [Accessed 8 August 2024]. Source adapted.



24EP22

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