Diploma Programme
Programme du diplôme
Programa del Diploma

Business management
Higher level
Paper 2

30 April 2026

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

Session number

1 hour 45 minutes

Instructions to students

- 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]**.

2226 – 3018

23 pages

Section A

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

1. Floral Studio (FS)

Floral Studio (*FS*) is a family-owned flower shop established by the Fiori family in 2002. *FS* sells flowers for weddings and events. Despite its success, *FS* remains a small business and relies on internal sources of finance. *FS* buys the flowers from overseas suppliers that offer an average lead time of three weeks. *FS*'s competitors have suppliers that offer a lead time of one week.

FS stores the flowers in a rented warehouse and uses just-in-case (JIC) stock control. *FS*'s waste is high, particularly when external temperatures are extremely hot or cold. *FS*'s production manager, Gino Fiori, is considering changing to just-in-time (JIT) stock control. Gino has gathered stock control information, shown in **Table 1**.

Table 1: *FS*'s stock control information for 2025

	Units
Buffer stock	**X**
Maximum stock level	6000
Reorder level	5000
Reorder quantity	4000
Weekly demand for flowers	1000

(a) State **two** reasons why a business may decide to stay small. [2]

. . . .

. . . .

. . . .

. . . .

(b) (i) Using information from **Table 1**, calculate *FS*'s buffer stock, **X**, *(show all your working).* [2]

. . . .

. . . .

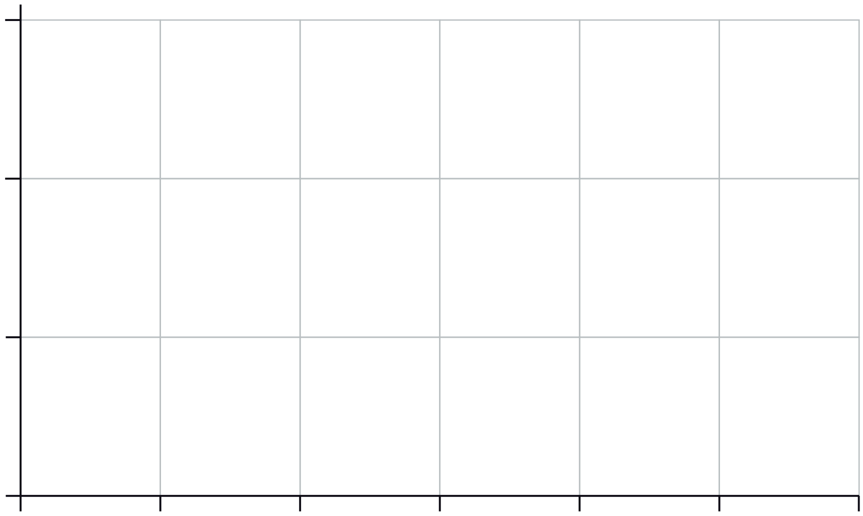
. . . .

. . . .

(This question continues on the following page)

(Question 1 continued)

(ii) Using information from **Table 1** and your answer to b(i), construct a fully labelled stock control chart for *FS*. [4]



(c) Explain **one** disadvantage for *FS* of changing to just-in-time (JIT) stock control. [2]

2. AutoParts Manufacturing (AP)

AutoParts Manufacturing (*AP*) makes parts for use in two brands of gasoline (petrol) powered automobiles (cars). In 2025, *AP* experienced insolvency.

Table 2 shows selected financial data for *AP*.

Table 2: Selected financial data for the years ending and as at 31 December 2024 and 31 December 2025 (all figures in $ millions)

	2024	**2025**
Cash	6.2	1.0
Cost of sales	72.0	78.0
Debtors	26.9	33.0
Non-current liabilities	4.0	**X**
Retained earnings	64.0	59.0
Sales revenue	115.6	92.0
Share capital	15.7	21.2
Stock	**Y**	38.0
Total assets	101.9	107.6
Total current liabilities	18.2	22.2

In 2024, *AP* produced 23 120 000 automobile parts in three factories with a total production capacity of 30 000 000 parts.

In 2024, *AP*'s capacity utilization rate was 77 %.

AP's stock turnover increased from 110 days in 2024 to 145 days in 2025.

(a) State **two** possible effects of insolvency on a business. [2]

. . . .

. . . .

. . . .

. . . .

(This question continues on the following page)

(Question 2 continued)

(b) Using **Table 2** and information in the stimulus:

(i) calculate non-current liabilities, **X**, for 2025 (*show all your working*); [2]

. . . .

. . . .

. . . .

. . . .

(ii) calculate stock, **Y**, for 2024 (*show all your working*). [2]

. . . .

. . . .

. . . .

. . . .

(c) In 2025, *AP*'s output/production fell by 10 %. Calculate *AP*'s capacity utilization rate in 2025 (*show all your working*). [2]

. . . .

. . . .

. . . .

. . . .

(d) With reference to data in the stimulus, explain **one** reason, other than declining revenue, why *AP* may have become insolvent in 2025. [2]

. . . .

. . . .

. . . .

. . . .

3. GiftNest (GN)

Alexis and Sofia Dimas run *GiftNest* (*GN*), a business selling personalized gift baskets and wrapping paper. **Table 3** shows *GN*'s forecasted financial data for January.

Table 3: *GN*'s forecasted financial data for January

	Selling price per unit	Variable costs per unit	Break-even point	Monthly profit
Wrapping paper rolls	$12	$6	150 units	**B**
Gift baskets	$90	$60	**A**	$12 300

Monthly fixed costs total $3600. Gift baskets, which require additional storage space, are allocated 75 % of these costs.

GN has forecasted sales of 500 baskets and 2400 rolls of wrapping paper in January. *GN* has liquidity problems and is considering removing one product line. Sofia argues that *GN* can achieve greater economies of scale from wrapping paper than from gift baskets. Alexis agrees but believes gift baskets offer greater future potential through stronger customer value, higher per unit price, and opportunities for lean production. Alexis also thinks the current fixed cost allocation makes it unclear which product line contributes the most to *GN*.

(a) State **two** methods of lean production. [2]

. . . .

. . . .

. . . .

. . . .

(This question continues on the following page)

(Question 3 continued)

(b) Using **Table 3** and information in the stimulus:

(i) calculate January's forecasted break-even point, **A**, for gift baskets (*show all your working*); [2]

. . . .

. . . .

. . . .

. . . .

(ii) calculate the forecasted profit, **B**, for wrapping paper in January (*show all your working*); [2]

. . . .

. . . .

. . . .

. . . .

(iii) calculate the total profit made by *GN* in January if the actual sales of gift baskets are 3 % higher than forecasted (*show all your working*). [2]

. . . .

. . . .

. . . .

. . . .

(c) Using your calculations from part (b), explain **one** reason why using contribution costing can help *GN* decide which product line to remove. [2]

. . . .

. . . .

. . . .

. . . .

Section B

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

4. Reina Jabones (RJ)

Reina Jabones (*RJ*) is a publicly held company that manufactures laundry detergents for washing clothes. *RJ* is the market leader for laundry detergents in Country X, with a 55 % market share. *RJ*'s products include powder detergents and liquid detergents.

(a) State **two** features of a publicly held company. [2]

. . . .

. . . .

. . . .

. . . .

(This question continues on the following page)

(Question 4 continued)

Sol, *RJ*'s most popular powder detergent, has been on the market for 25 years. Competitors offering similar powder detergents to Sol set their prices low, decreasing their profit margins. *RJ* uses competitive pricing and sets the price for Sol below competitors' prices. Sol is a high-quality product. Its unit production costs are low due to economies of scale; however, profit margins for Sol are lower than for *RJ*'s other products.

(b) Explain **two** disadvantages for *RJ* of using competitive pricing for Sol. [4]

. . . .

. . . .

. . . .

. . . .

. . . .

. . . .

. . . .

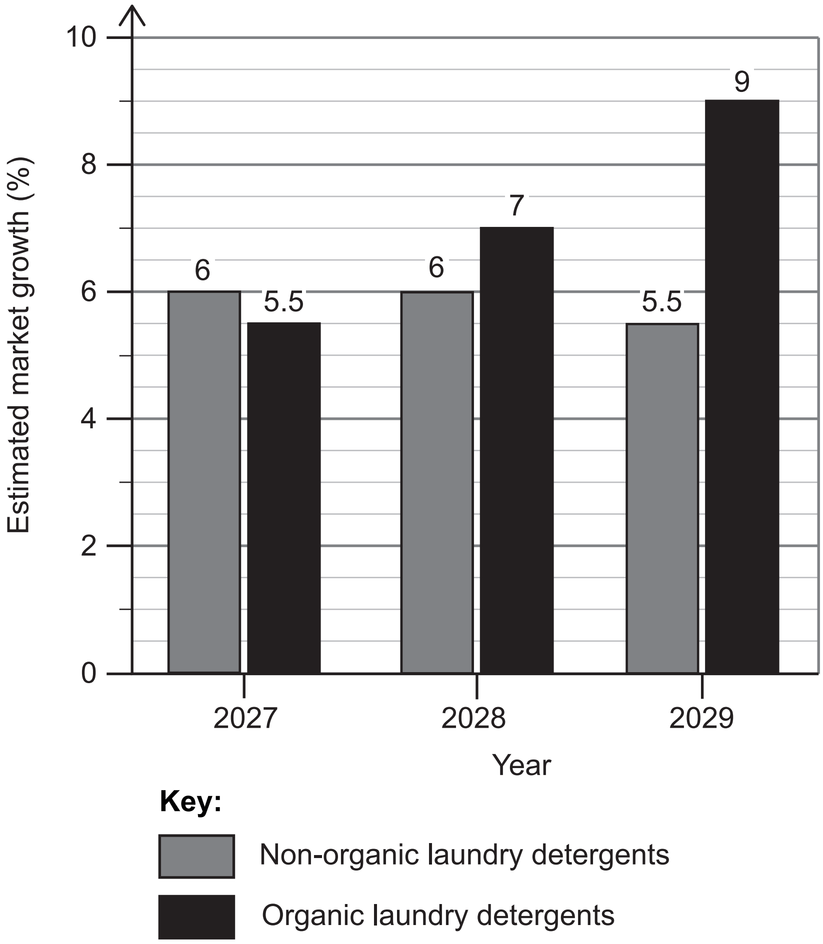
. . . .

(This question continues on the following page)

(Question 4 continued)

RJ launched two organic (free from artificial chemicals) laundry detergents made from plants. *RJ* is the only company in the market currently offering organic laundry detergents. *RJ* consulted secondary research on the market growth of organic and non-organic laundry detergents in Country X for the next three years (see **Figure 1**).

Figure 1: Estimated market growth rate of organic and non-organic laundry detergents in Country X, 2027–2029



(c) Using data from **Figure 1**, comment on the estimated market growth for organic **and** non-organic laundry detergents in Country X for 2027–2029. [2]

. . . .

. . . .

. . . .

. . . .

(This question continues on the following page)

(Question 4 continued)

RJ’s product portfolio has four brands:

- Sol and Rey, *RJ*’s powder detergents, operate in a slow-growing market. Sol is profitable and has a 65 % market share for powder detergents. *RJ* recently reduced Rey’s price and updated its packaging, but Rey’s sales continue to fall. Rey has a 16 % market share for powder detergents.
- CocoX and EcoX, *RJ*’s new organic liquid detergents, sell at premium prices. Sales of both products are growing rapidly. The two products together have an 80 % market share of liquid detergents. *RJ*’s advertising expenses for CocoX and EcoX are high.

(d) Complete the Boston Consulting Group (BCG) matrix (**Figure 2)** for *RJ*’s four brands. [2]

Figure 2: *RJ*’s Boston Consulting Group (BCG) matrix

<table>
<tr><td colspan="2" rowspan="2"></td><th colspan="2">Market share</th></tr>
<tr><td>High</td><td>Low</td></tr>
<tr><th rowspan="2">Market growth</th><td>High</td><td>. . . . .
. . . .</td><td>. . . . .
. . . .</td></tr>
<tr><td>Low</td><td>. . . . .
. . . .</td><td>. . . . .
. . . .</td></tr>
</table>

(This question continues on page 13)

Please **do not** write on this page.

Answers written on this page
will not be marked.

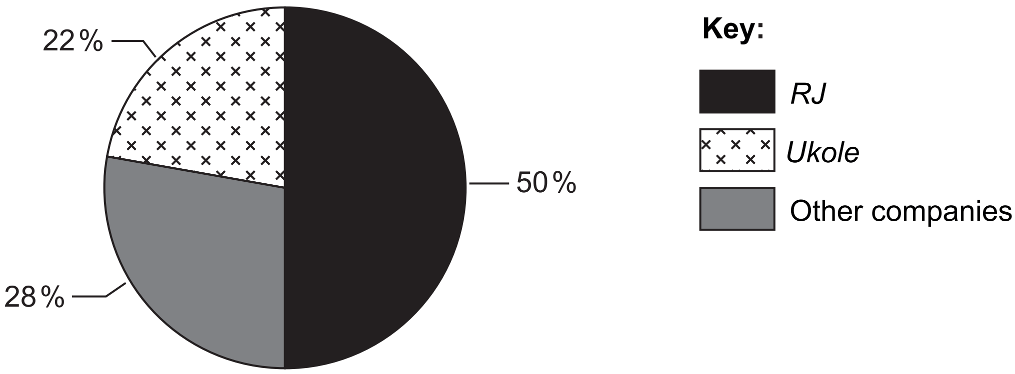
(Question 4 continued)

Ukole Ltd., a multinational company, recently entered the laundry detergent market in Country X. *Ukole* offers several products, including organic detergent tablets that it claims are three times more efficient than liquid and powder detergents. *Ukole* invests heavily in research and development (R&D). *RJ*'s chief executive officer (CEO), Pedro Piazza, is worried about *Ukole*'s entry into the market. Pedro has requested a brand loyalty survey (see **Table 4**) and updated market share data (see **Figure 3**). Among other things, the data showed that *RJ*'s market share had decreased by 5%.

Table 4: *RJ*'s brand loyalty survey results

		%		%		%
How long have you been buying *RJ*'s laundry detergents?	Less than a year	10	1–4 years	20	More than four years	70
How would you rate your overall satisfaction with *RJ*'s laundry detergents?	Satisfied	65	Neutral	25	Dissatisfied	10
What factor would make you change to another laundry detergent brand?	Lower price	40	Better detergent quality	45	Discounts & special offers	15
How likely are you to continue buying *RJ*'s laundry detergents?	Very likely	50	Neutral	30	Unlikely	20

Figure 3: Laundry detergent market share by company



(This question continues on the following page)

(Question 4 continued)

(e) Using **Table 4**, **Figure 3** and other information in the stimulus, discuss how *Ukole*'s entry into the laundry detergent market might affect *RJ*'s position as a market leader. [10]

(This question continues on the following page)

(Question 4 continued)

5. Quantum Leap (QL)

Quantum Leap (*QL*), develops and sells AI (artificial intelligence) products. Under the leadership of the chief executive officer (CEO), Sam Smart, *QL* experienced substantial growth. Sam, an autocratic leader, made decisions without consultation. Sam based employee appraisals on individual targets and performance.

(a) State **two** types of employee appraisal. [2]

. . . .

. . . .

. . . .

. . . .

Following Sam's departure in 2023, Lucy Thomas became *QL*'s new CEO. Lucy, a democratic leader, introduced teamwork throughout *QL*. Previously, each department worked independently, and department managers have developed autocratic leadership styles. Lucy met resistance when she asked department managers to discuss decisions with their teams and with other departments. *QL*'s production manager presented *QL*'s productivity data for 2021–2025, shown in **Table 5**.

Table 5: *QL*'s productivity data, 2021–2025

Time period	Labour productivity (output per hour worked)	Capital productivity (output per hour of capital used)
2021	1.9	2.2
2022	1.9	2.2
2023	1.9	2.2
2024	1.6	2.2
2025	1.5	2.2

(This question continues on the following page)

(Question 5 continued)

(b) Using figures from **Table 5**, comment on **two** aspects of *QL*'s productivity for 2021–2025. [4]

. . . .

. . . .

. . . .

. . . .

. . . .

. . . .

. . . .

. . . .

(This question continues on the following page)

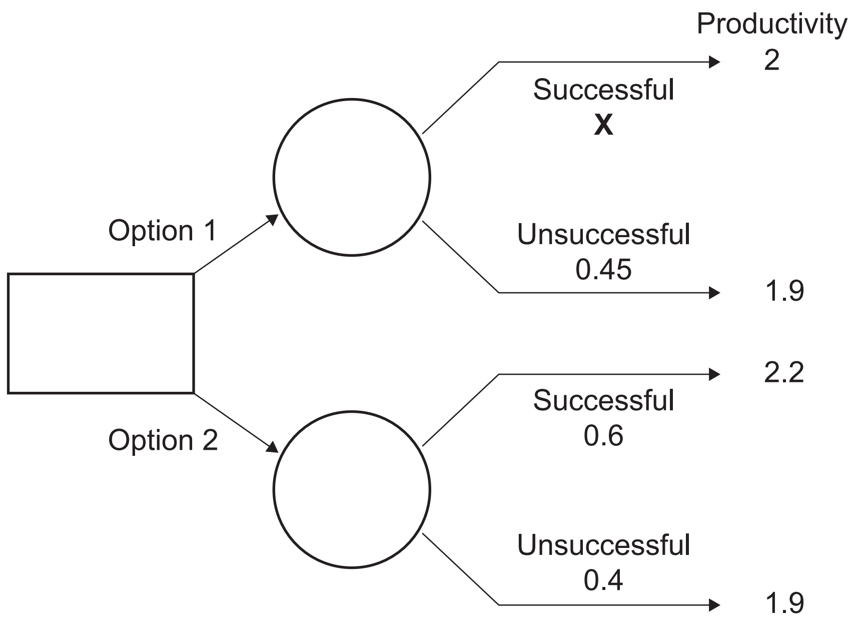
(Question 5 continued)

QL managers miss Sam's autocratic leadership style and think *QL* has become inefficient. Lucy believes her democratic leadership style caused cultural clashes between herself and *QL* managers. Lucy is considering two options to minimize cultural clashes with *QL* managers:

- **Option 1:** Train *QL* managers on effective teamworking and management of organizational cultural changes.
- **Option 2:** Recruit democratic managers externally to develop a democratic culture at *QL*.

Lucy constructed the decision tree shown in **Figure 4**.

Figure 4: *QL*'s decision tree



For the decision tree, Lucy assigned probabilities based on her experience. She also calculated the expected productivity shown in **Table 6**. Lucy wanted to consider all employees' opinions and morale (confidence and motivation), but department managers argued that the decision tree was sufficient.

Table 6: *QL*'s Expected productivity

	Option 1	**Option 2**
Expected productivity	**Y**	2.08

(This question continues on the following page)

(Question 5 continued)

(c) (i) Using **Figure 4**, calculate the probability of success, **X**, for **Option 1** (*no working required*). [1]

. . . .

. . . .

(ii) Using **Figure 4**, calculate the expected productivity, **Y** in **Table 6**, for **Option 1** (*no working required*). [1]

. . . .

. . . .

(iii) Explain **one** disadvantage for Lucy of only using the decision tree as a decision-making tool. [2]

. . . .

. . . .

. . . .

. . . .

(This question continues on page 21)

Please **do not** write on this page.

Answers written on this page
will not be marked.

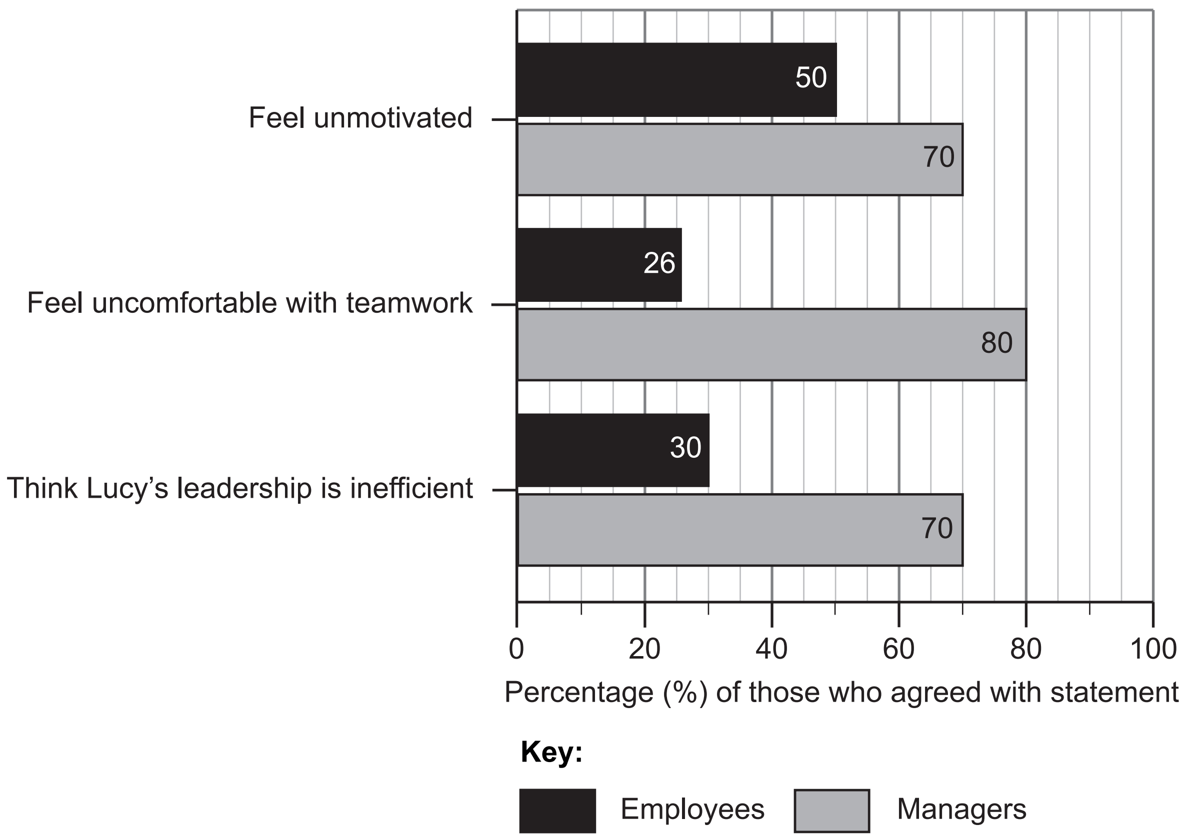
(Question 5 continued)

The artificial intelligence industry is highly competitive. Lucy must find a solution to *QL*'s cultural clashes and falling productivity to maintain profit margins. Before making her decision on what option to choose, Lucy consulted with the human resources (HR) manager, who reported that:

- Current *QL* managers could attend an off-the-job training programme, costing $300 000 and taking each manager 30 days to complete.
- Research shows existing employees are less willing to be trained than newly recruited employees.
- The estimated cost of recruiting new managers is $700 000. Recruitment will take three months.

Lucy asked the HR manager to conduct an employee survey on employees' opinions and morale. Some of the results are shown in **Figure 5**.

Figure 5: Selected results from *QL*'s employee survey



(This question continues on the following page)

(Question 5 continued)

(d) Using **Figure 5** and other information in the stimulus, discuss whether Lucy should implement **Option 1** or **Option 2** to reduce the cultural clashes at *QL*. [10]

(This question continues on the following page)

(Question 5 continued)

Disclaimer:

References:

3. nikkytok, 2018. *Gift basket on white background* - stock photo. [image online] Available at: https://www.gettyimages.co.uk/detail/photo/gift-basket-on-white-background-royalty-free-image/1028963440 [Accessed 19 August 2025]. Source adapted.

hartcreations, 2008. *Christmas wrapping* - stock photo. [image online] Available at: https://www.gettyimages.co.uk/detail/photo/christmas-wrapping-royalty-free-image/173019107 [Accessed 19 August 2025]. Source adapted.

4. [image of laundry detergent] Lugowski, D., 2024. *Person adding washing powder to the washer, close up. Female hand holding laundry powder – stock photo*. [image online] Available at: https://www.gettyimages.co.uk/detail/photo/person-adding-washing-powder-to-the-washer-close-up-royalty-free-image/2004750073 [Accessed 4 July 2025]. Source adapted.