

Markscheme

May 2026

Business management

Higher level

Paper 2

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The markbands on page 3 should be used where indicated in the markscheme.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptor.
1–2	• Little understanding of the demands of the question. • Little use of business management tools and theories; any tools and theories that are used are irrelevant or used inaccurately. • Little or no reference to the stimulus material. • No arguments are made.
3–4	• Some understanding of the demands of the question. • Some use of business management tools and theories, but these are mostly lacking in accuracy and relevance. • Superficial use of information from the stimulus material, often not going beyond the name of the person(s) or name of the organization. • Any arguments made are mostly unsubstantiated.
5–6	• The response indicates an understanding of the demands of the question, but these demands are only partially addressed. • Some relevant and accurate use of business management tools and theories. • Some relevant use of information from the stimulus material that goes beyond the name of the person(s) or name of the organization but does not effectively support the argument. • Arguments are substantiated but are mostly one-sided.
7–8	• Mostly addresses the demands of the question. • Mostly relevant and accurate use of business management tools and theories. • Information from the stimulus material is generally used to support the argument, although there is some lack of clarity or relevance in some places. • Arguments are substantiated and have some balance.
9–10	• Clear focus on addressing the demands of the question. • Relevant and accurate use of business management tools and theories. • Relevant information from the stimulus material is integrated effectively to support the argument. • Arguments are substantiated and balanced, with an explanation of the limitations of the case study or stimulus material.

Section A

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

Reasons include:

- it avoids dilution of control and ownership (if it becomes a company) / it allows its owners to maintain their original mission and vision;
- it reduces the need to generate debt related to borrowing and keeps control of their own finances;
- it lacks the initial finance to grow into a larger business;
- to offer a personalized service;
- less competition in niche market;
- it avoids growth costs, such as financial costs or higher unit costs / it avoids diseconomies of scale;
- less workload.

Accept any other relevant reason stated.

N.B. No description is required.

Award [1] for each relevant reason stated up to a maximum of [2].

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

Buffer stock = maximum stock - reorder quantity.

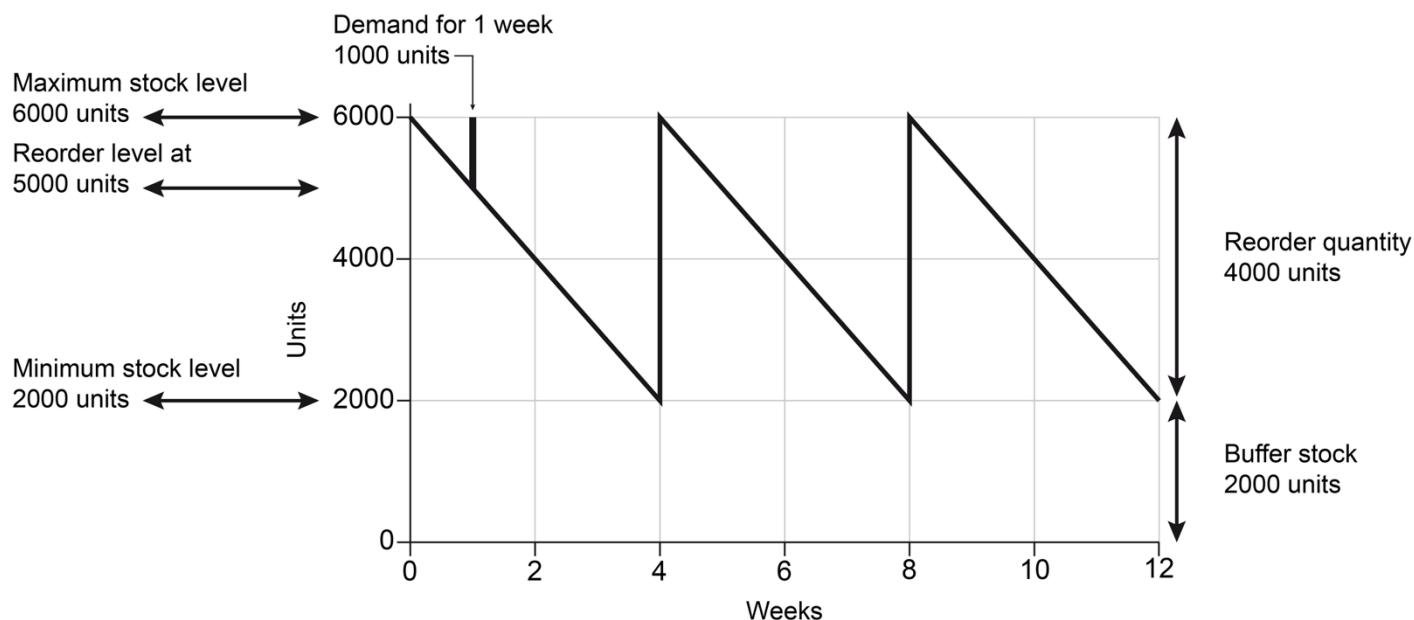
FL's buffer stock = 6000 – 4000 = **2000 units**.

Award [1] for working and [1] for the correct answer.

N.B. Do not penalize the lack of "units" as they are included in the table.

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

Stock control chart for *FS* for 2025



Marks should be allocated for showing:

Both axes labelled as units or stock level for y-axis and weeks for the x-axis. **[1]**

Stock control chart is drawn with understanding (i.e. downward slope line indicating depletion of stock in a linear manner in week 0 - week 4 and sudden increase due to stock replenishment in week 4. **[1]**

Buffer stock at 2000 units. **[1]**

Reorder level at 5000 units / Weekly demand at 1000 units / Maximum stock level at 6000 units / Minimum stock level at 2000 units / Reorder quantity 4000 units - award **[1]** when a student correctly labels **at least three** of these aspects on a mostly correctly drawn chart (i.e. downward slope and sudden increase). **No OFR** as figures are given in **Table 1**.

Award a maximum of **[4]**.

N.B. OFR applies for the buffer stock level from (b)(i). Students can be awarded full marks even if the buffer stock level used in this question was incorrectly calculated in (b)(i).

Lead time / title of the chart is not required for full marks.

Preferably, the chart should be drawn across more weeks (as shown above), but do not penalize if a student draws up to 4 weeks accurately and indicates a sudden increase in stock.

Marks on accurate labelling of axes **and** of buffer stock can still be awarded even when the line is missing / the line is incorrect.

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

JIT stock control management system is designed to minimize inventory levels by ordering stocks only when needed. JIT works well when supply lead times are short.

- ***FS* has a lead time of three weeks which seems to be long compared to their competitors (one week).** Any delay in the supply chain or an unexpected fluctuation in demand could lead to a lack of stock, lost sales, dissatisfied customers, and potentially damaged reputation.
- A JIT stock control system could be risky, **as *FS* buys flowers from overseas.** Any small disruption in the supply chain, such as shipping delays or supplier issues, can have a disproportionate impact on *FS*'s business. *FS* cannot afford to run out of stock, lose sales, and damage its reputation.
- It is expensive to set up an ICT system to keep track of the supply which may be difficult given *FS*' lack of external finance/being small/being a family-owned business.

Disadvantages with no application for [1]:

- Increase transport cost
- Higher logistic/administrative burden
- Lower discounts as they are not buying in bulk

Award [1] for a relevant disadvantage explained and [1] for application to FS.

Do not accept “flowers” on its own as application. More relevant application to the stimulus is required for full marks.

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

Possible effects of insolvency include:

- bankruptcy: Insolvent businesses sometimes must file for bankruptcy.
- voluntary/involuntary liquidation of assets.
- unable to pay off debts.
- decline in sales: Customers may switch to competitors, especially if the business sells products that require after-sales service or involve a warranty.
- lower employee morale: Employees may lose trust in the company and become demotivated or even seek employment elsewhere.
- challenges on recruitment: Insolvent businesses have difficulty attracting new employees.
- loss of credit worthiness: Past creditors may no longer extend credit.
- restructuring: Insolvent businesses may have to restructure to improve profitability and may have to find lenders that can help them restructure their debt.

Accept any other relevant effect of insolvency.

Award [1] for each effect of insolvency on a business stated up to [2].

Do not accept effects of cash-flow problems such as ‘low cash balance’, ‘poor liquidity’ or ‘need to borrow more’.

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

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

Total assets	\$107.6
Minus: total current liabilities	\$22.2
Minus: Share capital	\$21.2
<u>Minus: Retained earnings</u>	<u>\$59</u>
Total non-current liabilities	\$5.2 millions

Award [1] for the correct answer and [1] for correct working. \$ millions not required as given in the stimulus.

Accept other relevant methods.

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

Stock Turnover ratio (days) = (Average stock / Cost of sales) × 365

Stock Turnover ratio (for 2025) = (Average stock / Cost of sales) × 365

145 days = (Average stock / \$78) × 365 days

(Average sales stock) [AS] / \$78 × 365 = 145

Average Stock for 2025 = 145/365 × \$78 = \$30.98 (**allow rounding \$31**)

Average Stock for 2025 = \$31

Average stock = (opening stock + closing stock) / 2

Closing stock for 2025 = \$38

But as Opening stock for 2025 = closing stock for 2024 = Y

Then,

Average stock 2025 = (closing stock for 2024 + closing stock for 2025) / 2

\$31 = (closing stock for 2024 + \$38) / 2

$(Y + \$38) / 2 = \30.98

$(Y + \$38) = \30.98×2

$Y + \$38 = \61.96

$Y = \$61.96 - \$38 = \$23.96$ (Allow rounding to \$24)

Stock for 2024, Y = \$23.96

Award [1] for the correct answer and [1] for correct working. \$ millions not required as given in the stimulus.

If a student correctly calculates the average stock for 2025 but thereafter makes errors and produces an incorrect answer, award [1].

Maximum award [2]. Accept other relevant method.

Alternatively, award a maximum of [1] if the **average** stock for 2024 is calculated (instead of average stock for 2025) using financial information for 2024 **as follows**:

Stock turnover = (average stock / cost of sales) $\times$ 365

110 days = (average stock/72) $\times$ 365

Average stock = (110 days $\times$ \$72)/365

Average stock (2024) = \$21.69 = \$21.70 millions (allow rounding to \$22 millions)

- (c) In 2025, AP's output/production fell by 10 %

Calculate AP's capacity utilization rate in 2025 (*show all your working*).

[2]

2025 output/23 120 000 – 1 = –10%

2025 output/23 120 000 = 0.9

23 120 000 $\times$ 0.9 = 2025 output = 20 808 000

20 808 000/30 000 000 $\times$ 100% = 69.36 %

Capacity utilization rate in 2025 was 69.36 %. (Accept rounding to 69.4% or 69%)

Alternative method:

Utilization rate in 2024 is 77% and it fell by 10%

Capacity utilization rate in 2025 = 77% $\times$ 0.9 = 69.3%.

Award [1] for the correct answer with % and [1] for correct working.

Do not penalize the lack of % if it is seen in the working or the final answer

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

Possible reasons for insolvency include:

- A probable net loss for the year (retained earnings declined).
“Retained earnings has fallen from \$64 million to \$59 million.” This removes the extra capital a business holds to protect itself against unexpected losses or financial downturns.
- A substantial increase in cost of sales.
“Cost of sales has increase from \$72 million to \$78 million.” At the same time, sales revenues decreased significantly from \$115.6 million to \$92 million. This may cause them cash-flow insolvent when their liquid assets are insufficient to pay the short-term debt.
- A substantial increase in the days taken to turnover stock.
“AP stock turnover increased from 110 days in 2024 to 145 days in 2025.” This may delay their receipts of liquid cash, making them cash-flow insolvent.
- An huge increase in current liabilities (from 18.2 million to 22.2 million) which may cause them cash-flow insolvent.
- A huge increase in non-current liabilities (from 4 million to 5.2 million). **Accept OFR from 2(b)(i).** This may reduce their net assets and create more expenses on interest payments.

Other reasons for insolvency (without application)

- *Working capital inefficiencies*
- *Rising account payables.*

Award [1] for a relevant reason explained and [1] for application to AP.

N.B. Do not award full marks if a student refers to “substantial reduction in cash balance from 6.2 million to 1 million” on its own. Some link to the working capital inefficiencies/higher stock turnover days etc. is required for full marks.

Do not award application mark if a student only writes out how the figures change without any explanation.

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

- **Just-in-Time (JIT)** (production, goods are only ordered when required minimizing stock levels and storage costs. Resources are used efficiently, and waste is reduced.)
- **Kaizen/TQM (Continuous Improvement)** (encourages employees at all levels to identify areas for improvement and implement small, incremental changes to reduce inefficiencies over time.)
- **Cell production** (workstations can be organized into efficient cells where teams handle specific tasks or stages of production reducing time moving materials and improving cooperation.)
- **Kanban** (a visual system for managing workflow, using cards or boards to track work items and their progress.)
- **Andon** (a visual control tool that raises concerns on quality, allowing operations to be stopped instantly to fix problems.)

Accept any other relevant methods of lean production.

*Students are not expected to word their responses exactly as above. Descriptions in brackets above not required **but** could be accepted instead of methods in bold.*

Award [1] for each method up to a maximum of [2].

Do not accept quality circles, benchmarking and quality standards, which are methods of managing quality.

Accept TQM, though strictly speaking TQM is a management philosophy.

(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]

Break-even point = Fixed costs ÷ Contribution per unit

Gift Baskets:

Contribution per unit = \$90 – \$60 = \$30

Allocated fixed costs = 75 % of \$3600 = \$2700

Break-even point = \$2700 ÷ \$30 = **90 baskets/units**

*Award [1] if the student accurately calculates the break-even point with units but without showing full working, **or** the student shows full working but makes one mathematical error in the final answer.*

Award [2] if the student accurately calculates the break-even point for gift baskets with units and shows full working.

Do not penalize the lack of baskets/units/\$ sign more than once per question. E.g. if it was already penalized in (b)(i), do not double or triple penalize in (b)(ii) and/or (b)(iii).

Do not penalize the lack of correct units if it is seen in the working or the final answer. The unit refers to the number of baskets, not \$ sign in this question.

Accept other relevant methods.

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

[2]

Profit = Total contribution – Allocated fixed costs

Wrapping paper:

Contribution per roll = \$12 – \$6 = \$6

Total contribution: $2400 \times \$6 = \$14\,400$

Allocated fixed costs: 25 % of \$3600 = \$900

Profit: $\$14\,400 - \$900 = \$13\,500$

Alternative method:

Sales revenue: $2400 \times \$12 = \$28\,800$

Fixed costs: $\$3600 \times 25\% = \900

Variable costs: $2400 \times \$6 = \$14\,400$

Profit: $\$28\,800 - \$15\,300 = \$13\,500$

Award [1] if the student accurately calculates the monthly profit with \$ sign but without showing full working, or shows full working but with one calculation error making the profit figure inaccurate.

Award [2] if the student accurately calculates the monthly profit with \$ sign, showing full working.

Do not penalize the lack of units/\$ sign if it is included in the working or in the final answer. Do not penalize more than once per question. E.g. if it was already penalized in (b)(i), do not double or triple penalize in (b)(ii) and/or (b)(iii).

Accept other relevant method.

- (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]

New sales quantities:

Gift baskets: $500 \times \frac{103}{100} = 515$ baskets

Total profit if actual sales for the gift baskets are 3 % higher than forecasted sales:

Total contribution for gift baskets: $\$30 \times 515$ baskets = **\$15 450**

Total profit for gift baskets: $\$15\,450 - \$2700 = \$12\,750$

Total profit for wrapping paper and gift baskets = $\$13\,500 + \$12\,750 = \$26\,250$

Alternative method:

Total profit for gift baskets = $\$90 \times 515 - \$60 \times 515 - \$2700 = \$12\,750$

Total profit for wrapping paper and gift baskets = $\$13\,500 + \$12\,750 = \$26\,250$

Award [1] if the student accurately calculates the total profit with \$ sign for gift baskets in January showing full working or accurately calculates the total profit with \$ sign made by GN in January, without showing full working, or makes one calculation error.

Award [2] if the student accurately calculates the total profit with \$ sign, made by GN in January showing full working.

N.B Allow student own figure rule (OFR): if a student makes an error in calculation for the profit figure for wrapping paper **in part (b)(ii)** and carries this figure through to their calculations **in part (b)(iii)**.

Do not penalize the lack of units/\$ sign if it is included in the working or the final answer. Do not penalize more than once per question. E.g. if it was already penalized in part (b)(i), do not double or triple penalize in part (b)(ii), and/or (b)(iii).

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

Contribution costing allows Alexis and Sofia to:

- focus on variable costs, which directly fluctuate with production or sales.
- see easily the contribution margin (sales revenue minus variable costs) for each product line.
- simplify its decision-making
- analyse each product's financial performance by identifying their contributions to fixed costs in a less arbitrary manner.

Alexis and Sofia can make quicker decisions on pricing and product discontinuation, because they only need to consider the variable costs and the contribution margin, rather than the complexity of allocating fixed costs to each product.

Wrapping paper generates a higher profit (\$13 500) compared to gift baskets (\$12 750) after the allocated fixed costs are taken into account. However, if contribution costing is used, the fixed costs are not allocated. If actual sales are 515 gift baskets in January, these contribute \$15 450 to paying any fixed costs, whereas wrapping paper only contributes \$14 400. Clearly these amounts are still close, and the business may use other criteria to decide which product to discontinue. For example, wrapping paper requires higher sales to break even (150 rolls versus 90 baskets), which may pose a risk during periods of low demand. Alexis may favour baskets for their higher per-unit contribution and lower break-even point, while Sofia might focus on the higher overall profit and scalability of wrapping paper.

N.B Allow student own figure rule (OFR) when applying their calculations from part (b) which may impact on their comments and comparisons between the two product lines.

Accept any other relevant comment that may not be worded exactly as above.

Award **[1]** for a relevant explanation and an additional **[1]** for application to GN using calculations from part (b).

Section B

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

Features include:

- **Limited liability.** The liability of the shareholders is limited to the extent of the shares owned by them
- **Separate legal identity**
- Can raise capital by selling shares in the stock market (offers shares to general public)
- Easy transferability.
- Needs to make available to the public and all shareholders certain information governed by listing rules.
- Can be subject to takeover if third party buys majority of shares.
- easier to raise finance than other forms of legal entity.
- operates in the private sector.
- continuity of existence.
- shareholders receive dividends in return for investment.
- usually very large organisations.
- has a Board of Directors.

Accept any other relevant feature.

N.B. no description is required.

Award [1] for a relevant feature stated up to a maximum of [2].

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

Competitive pricing strategy sets product or service prices based on competitor's prices.

Disadvantages include:

- This **leads to low quality perception**. Sol is a **high-quality** detergent, if *RJ* lowers Sol's price to remain competitive, customers may perceive Sol as a low-quality detergent, even if it's **high quality**.
- If *RJ* constantly matches Sol's price to lower prices, **profits can be eroded despite economies of scale**. Relying only on matching Sol's price to lower prices **may not be sustainable in the long run**.
- Sol **has lower profit margins** (than other products) **because of the lower price charged**.
- Need to continually monitor competitor's prices (for past 25 years - application) which would incur costs in both labour and/or data collection/analysis.

*Award [1] for a relevant disadvantage explained, with an additional [1] for application to *RJ*. Award up to a maximum of [2].*

- (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]

The estimated growth of the organic **laundry detergent** market is greater than that of non-organic.

The estimated market growth for organic laundry detergents is increasing from 5.5 % in 2027 to 9 % in 2029. The non-organic laundry detergents market is estimated to stay the same in 2027 and 2028 at 6 % and fall to 5.5 % in 2029. Market growth for organic detergents increases by 3.5 percentage points and for inorganic falls by 0.5 percentage points. Relative increases are 63.6% for organic and –8.3% for non-organic detergents.

Award **[1]** for a relevant comment on the market growth of both organic and non-organic laundry detergents and **[1]** for use of actual figures from **Figure 1**.

If a student makes a relevant comment on the market growth with the use of actual figures from **Figure 1** on **only** organic detergents **OR** non-organic detergents, award a maximum of **[1]**.

If a student makes a comment on only one of organic or non-organic detergents with no use of actual figures award **[0]**.

Accept if students calculate average growth.

- (d) Complete the Boston Consulting Group (BCG) matrix below (**Figure 2**) with *RJ*'s four brands.

[2]

		Market share	
		HIGH	LOW
Market Growth	HIGH	COCOX ECOX	
	LOW	SOL	REY

Award **[2]** for a complete matrix with all four brands placed accurately.

Award **[1]** for one error.

Award **[0]** for more than one error.

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

[10]

Arguments could include:

- As a market leader, *RJ* benefits from the **largest market share** in the industry with **55 % of the market share**. A large market share and low production cost, fuelled by **economies of scale**, may have led *RJ* to benefit from **high profitability**. However, after Ukole's entry into the market, *RJ* has lost customers and reduced its market share by 5 % (to 50 % according to **Figure 3**). Ukole, on the other hand, is growing and already has a 22 % market share. Ukole threatens to become the next market leader.
- As a market leader, *RJ* sets **innovation leadership** and benefits from **first mover advantage**. Innovation enables the production of **unique products** that can be charged **premium prices**. *RJ* launched a new line of organic detergents, being the sole company in the market to offer these products. However, Ukole, as a multinational company that makes high investments in research and development, is already offering a high technology product, detergent tablets (which are 3 times more efficient than liquid and powder detergents), that *RJ* cannot offer yet. *RJ* will probably lose its **first movers' advantage and innovation leadership**. This is underlined by the BCG matrix which shows *RJ* not having any products in the High growth/Low market share sector (Problem Child).
- As a market leader, *RJ* has the power to set prices accordingly to its strategic needs. *RJ* charges premium prices for its organic products leading to higher profits. *RJ* also undercuts competitors to increase market share, as this is the case with Sol's competitive pricing strategy. However, Ukole offers high technology unique products such as detergent tablets. Ukole also offers organic detergents. *RJ* will no longer be able to set all prices. As a multinational company Ukole will be able to achieve economies of scale and sustain lower prices to compete with *RJ*.

- Using the results of *RJ*'s loyalty survey (**Table 4**) 80% of customers are either neutral or likely to continue buying *RJ*'s products, meaning Ukole is appealing to a relatively small number of *RJ*'s customers to switch brands. This could erode *RJ*'s market leadership. However, the factors listed that might cause customers to change *i.e* lower price, better quality and special offers are all areas that Ukole can exploit. However, ranked against this is the fact that only 10% of customers are dissatisfied with *RJ*'s product again making it difficult for Ukole to increase its market share.
- **Figure 3** suggests market leadership (50%) with very strong brand loyalty and customer satisfaction over a sustained period of time (**Table 4**). The new organic products (CocoX and EcoX) are even higher market share (80%). However, Sol is low growth/low market share despite reduced prices and new packaging, and may need to be divested to meet the challenges from Ukole if it cannot be repositioned.
- Also, as indicated previously, price wars between *RJ* and Ukole may occur especially given the resources of Ukole which may require review of growth strategies to maintain market leadership. Maybe mergers and acquisitions for the other 28% of competitors in the laundry detergent market is an option if permitted by government competition regulations/laws.

Possible limitations explicitly linked to the stimulus that require further **explanation** for the top markband:

- What is the size/financial strength of Ukole?
- What other countries do they operate in?
- What products do they produce?
- What are customer preferences?

Accept any other relevant argument.

N.B. the question is focused on the affect of Ukole's entry into the laundry detergents market on *RJ*'s market leadership.

Marks should be allocated according to the markbands on page 3 with further guidance below:

If there is no balance, then for a one-sided response where only one affect is considered then award a maximum of [3].

*If the student makes no reference to **Table 4** and **Figure 3** then this only partially addresses the demands of the question, then the maximum mark to be awarded is [6] even if there is some balance.*

If the student discusses one affect only (with balanced and substantiated arguments) then award a maximum of [5].

A balanced response is one that provides at least one argument for and one argument against two affects.

A conclusion is expected in this response as the command term is discuss.

N.B. *students cannot reach the top marks if there is no relevant reference/application to the stimulus. They must also show awareness/explain the limitations of the stimulus material.*

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

Types of employee appraisal include:

- Formative
- Summative
- 360-degree feedback
- Self-appraisal

Accept any other relevant appraisal.

Award [1] for each type of appraisal up to a maximum of [2].

N.B. Do not accept individual targets.

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

- QL's labour productivity had a steady value of **1.9** from 2021 to 2023.
- In 2024, after Lucy's appointment, QL's labour productivity decreased from **1.9 to 1.6** in 2024 and fell further to **1.5** in 2025.
- Capital productivity has remained constant with a value of **2.2** for five years

Mark as [2]+[2].

Award [1] for a comment and [1] for referring to specific data from the table(application).

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

Probability of success for option 1 = $1 - 0.45 = \mathbf{0.55}$ (Accept 55%)

Award [1] for the correct answer, no working required.

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

Expected productivity = $(0.55) \times 2 + (0.45) \times 1.9 = \mathbf{1.955}$ (Accept rounding to **1.96**)

N.B. OFR applies for the probability of success from (c)(i). Students can be awarded full marks even if the probability of success used in this question was incorrectly calculated in the previous question (c)(i).

Award [1] for the correct answer, no working required.

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

- The probabilities in the decision tree are based on Lucy's experience and are only estimations, which could be wrong.
- If Lucy only uses a decision tree as a decision-making tool, only quantitative data will be considered, ignoring qualitative data, such as employees' opinion and morale, which are not considered, leading to errors.

Award [1] for a relevant disadvantage explained and [1] for application.

- (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]

Option 1: train QL managers on effective teamworking and management of organizational cultural changes

- Training current managers in how to better manage organizational change can help to unify QL's organizational culture and align the entire business with Lucy's vision. Currently 70 % of managers believe Lucy's leadership is inefficient and feel unmotivated and 80 % of them feel uncomfortable with teamwork. QL's current cultural clashes could be minimized with training and improve productivity levels at QL.
- Equipping current managers with the essential skills will boost their motivation and sense of belonging. Sharing common values with the organization allows them to unify their goals. All these will improve their productivity and flexibility which is highly needed in the dynamic AI environment. As Lucy met resistance when she asked department managers to discuss decisions with teams, training will help reduce managers' resistance to change. Employee survey results (**Figure 5**) indicated a high % (80%) of managers feel uncomfortable with teamwork. This indicated a strong need for training in this area.
- Training current managers is less expensive than recruiting new managers. The estimated cost of training QL managers is \$300 000 and takes 30 days to complete while the cost of recruiting managers is \$700 000 taking three months.

On the other hand,

- Lucy needs a solution to cultural clashes to maintain profit margins. According to the HR manager, training QL managers will take 30 days to complete. During the off the job training, productivity will slow down and this will harm short-term profitability.
- QL employees, particularly managers accustomed to an autocratic leadership style, will take time to absorb the new culture. Plus, there is no guarantee that the old habits of autocratic culture will not persist. Research shows that existing employees in an organization are less willing to be trained than new workers. Effectiveness of training can be limited.
- In the short term and during the training process, productivity at QL may decrease.

Option 2: recruit democratic managers externally to develop a democratic culture at QL.

- The alignment of the newly recruited managers to Lucy's democratic leadership will probably be immediate. New managers are likely to be comfortable with teamwork and collaborative practices with a positive effect on QL's productivity. This will solve the inefficiency problem QL currently has.
- The newly recruited managers will have better skills in managing teamwork. They could also bring fresher ideas and ensure that decision making is faster at QL. Hence QL's productivity will improve.

On the other hand,

- Recruiting new managers will be more expensive than training QL managers with a cost of \$700 000, which is \$400 000 more. Decision tree results, however, show that the gain of option 2 over option 1 in efficiency is (\$2.08 – \$1.955) million *i.e.* \$0.125 million, indicating option 1 is financially feasible.
- Newly hired managers may lack institutional knowledge and may struggle to build relationships with QL's existing employees (no application).
- There is no guarantee that "democratic managers" can be recruited, particularly in the AI industry.
- Recruiting new managers may further erode morale and motivation at QL. If existing managers are replaced, costs in severance packages may incur and they may take their

institutional knowledge to competitors.

50 % of employees and 70 % of managers are already unmotivated.

Marks should be allocated according to the markbands on page 3 with further guidance below:

If there is no balance, then for a one-sided response where only one option is considered then award a maximum of [3].

*If the student makes no reference to **Figure 5** then this only partially addresses the demands of the question, then the maximum mark to be awarded is [6] even if there is some balance.*

If the student discusses one option only (with balanced and substantiated arguments) then award a maximum of [5].

A balanced response is one that provides at least one argument for and one argument against each option.

Students may contrast one option with another for a balance as long as at least two arguments are given for each option.

A conclusion is expected in this response as the command term is discuss.

N.B. *students cannot reach the top marks if there is no relevant reference/application to the stimulus. They must also show awareness/explain the limitations of the stimulus material.*
