

Markscheme

May 2024

Business management

Standard 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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** features of a sole trader. **[2]**

As a **sole trader**, an individual:

- has **full control** and runs the business
- has sole **ownership** of the business
- is **not a separate legal entity** (assumes full legal responsibility for all business debts)
- has **minimal** admin and filing **requirements**. Registering the business is generally relatively easy and inexpensive and quick
- enjoys a **greater** level of **privacy** and **limited accountability compared to a corporation**
- usually has limited **finance**
- the owner has unlimited liability
- lacks continuity.

Accept any other relevant feature.

N.B. no description is required.

*Award **[1]** for each correct feature stated. Award a maximum of **[2]**.*

- (b) Using **Table 1**, complete the following figures for the cash-flow forecast for *HG* for 2025:

- (i) total cash outflows, **W**, for quarter 1 (*no working required*); **[1]**

Total payments (cash outflow) (**W**) for quarter 1 = (\$13 400 + \$1 395 + \$900 + \$1500 + \$370 + \$170) = **\$17 735**

N.B. no working required.

*Award **[1]** for the correct answer, \$ sign not needed.*

- (ii) total cash inflows, **X**, for quarter 2 (*no working required*); **[1]**

Total cash inflow (**X**) for quarter 2 = Total cash outflows + Net cash flow
Total cash inflow (**X**) for quarter 2 = \$17 945 + \$2 055 = **\$20 000**

Alternative calculations:

Total cash inflow (**X**) for quarter 2 = Cash sales revenues + Bank loan =
Total cash inflow (**X**) for quarter 2 = \$20 000 + \$0 = **\$20 000**

N.B. no working required.

*Award **[1]** for the correct answer, \$ sign not needed.*

- (iii) opening balance, **Y**, for quarter 3 (*no working required*); **[1]**

The **opening balance (Y)** for **quarter 3** 2025 is **\$2030**
(The same as the closing balance in Q2)

N.B. *no working required.*

Award [1] for the correct answer, \$ sign not needed.

- (iv) closing balance, **Z**, for quarter 4 (*no working required*). **[1]**

Closing balance (**Z**) for quarter 4 = Net cash flow Q4 + opening balance Q4 =
Closing balance (**Z**) for quarter 4 = \$3 895 + \$2 325 = **\$6 220**

Alternative calculations:

Opening balance Q4 + cash inflows Q4 – cash outflows Q4 = \$2325 + \$19300 – \$15405 =
\$6 220

N.B. *no working required.*

Award [1] for the correct answer, \$ sign not needed.

- (c) Using information from **Table 1**, calculate the interest rate on *HG's* one-year short-term loan for 2025 (*show all your working*). **[2]**

$$\$1395 \times 4 - \$5000 = \$580 / \$5000 \times 100\% = 11.6\%$$

Alternative answer:

Original amount of the bank loan = \$5000

Total loan outflows (loan + interest) = loan Q1 + loan Q2 + loan Q3 + loan Q4 = \$1395 + \$1395 + \$1395 + \$1395 = \$5580

Interest paid = Total loan outflows – Original amount of the bank loan = \$5580 – \$5000 = \$580

Interest rate = (interest / original amount of the bank loan) × 100%
= (\$580 / \$5000) × 100% = 11.6%

Award marks as follows:

[2] if a candidate provides the **correct answer with working**. A correct answer must include the **percentage sign (%)**.

[1] If a candidate **who has shown working but** has an incorrect answer.

[0] If a candidate does not show any working and simply writes the answer without a % sign i.e. 11.6.

Award no marks [0] merely for writing the formula.

- (d) Explain how this cash-flow forecast might help Hernan operate his business, **other than** by supporting his loan application. **[2]**

Cash flow forecasts **help control and monitor cash flow in the business**. It will help Hernan to **identify, in advance, the cash position each month** (or in this case, each quarter). For example, **Hernan** shows in advance that his business **will need some extra cash** from somewhere **in the first quarter**. Closing balance for the first quarter is (25). He also knows that his cash position is likely to improve at the end of the time period. Producing a cash-flow forecast is part of the planning process because it deals with the future.

Accept any other relevant explanation.

*Award **[1]** if the candidate states that cash-flow forecasts help control and monitor cash in the business, or if it helps Hernan identify in advance the cash position each quarter by showing how much cash he is expected to have at the end of each quarter. Award an additional **[1]** for another relevant explanation with application to the stimulus, such as needing extra cash somewhere in the first quarter. Award a maximum of **[2]**.*

2. (a) State **two** features of operating as a partnership. **[2]**

Features could include:

- **usually more capital** is **available** for the business.
- greater **borrowing capacity than a sole trader**.
- **partners'** business affairs are **private**.
- there is **limited regulation**.
- **spreads the risk** across more people, so if the business gets into difficulty, then there are more people to share the burden of debt.
- partner **may bring other skills and ideas** to the business.
- **increased credibility** with potential customers and suppliers.
- **partners** will (usually) have **unlimited liability**.
- **decisions** are made **jointly** by the **partners**.
- the business is owned and managed by **more than one person**.
- typically has a **greater degree of accountability than a sole trader**.
- set-up costs typically higher than sole traders and less than a company.

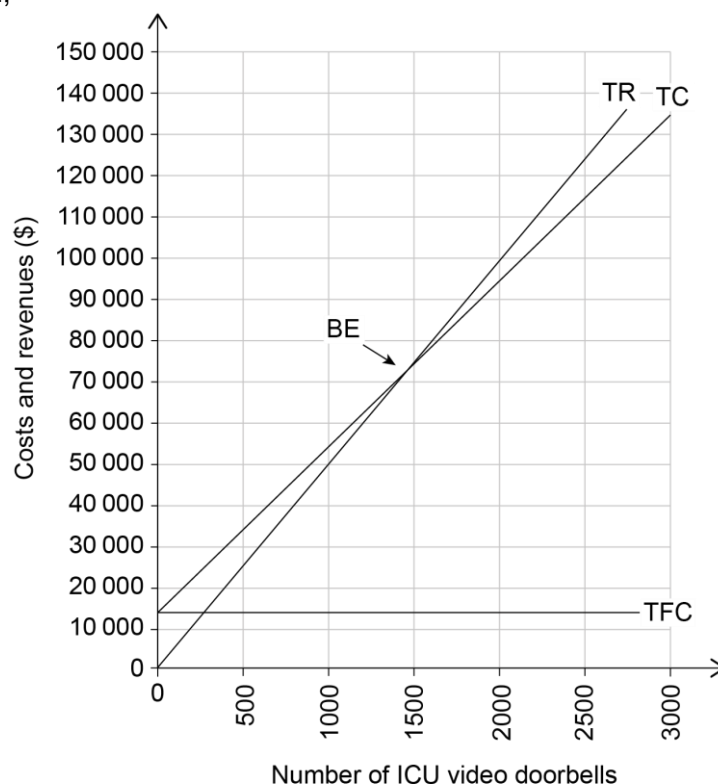
Accept any other relevant feature.

Do not accept “shared resources” as it is too vague. The response must be more specific.

*Award **[1]** for each feature stated, up to a maximum of **[2]**.*

(b) Using information from **Table 2**:

- (i) construct a fully labelled break-even chart for *JnDj*, to scale, for the new ICU video doorbell; **[4]**



N.B. drawn diagrams must have a consistent verifiable scale, otherwise it cannot be determined if TR and TC are accurate, even if correctly labelled.

The BE(Q) is 1500 units --- $BE(Q) = \text{fixed costs} / \text{Contribution per unit} = \$15000 / (\$50 - \$40)$

The BE(\$ is = 1500 units \times \$50 = \$75 000

The break-even point is 1500 units; \$75 000

Award marks as follows:

[1] for a correctly labelled and accurately drawn total revenue (TR) line – can be TR or revenue (but not “sales” on its own).

[1] for a correctly labelled and accurately drawn total cost (TC) line.

[1] for identifying the break-even point. The break-even point must show where the total revenue and total cost line intercept. Ideally, the candidate will draw an arrow pointing to the break-even point and label the arrow. However, accept as an accurately labelled break-even point a vertical line from the x-axis to the break-even point, provided that the line is labelled “break-even point”.

[1] for correctly labelling BOTH axes – y-axis must have both costs and revenue; x-axis must have some indication of quantity, e.g. output/units/quantity/items/number of ICU video doorbells.

A break-even chart that is not neat, not drawn with a straight edge, can be awarded a maximum of **[2]**.

A break-even chart that is not drawn to scale can be awarded a maximum of **[2]** if the axes are both correctly labelled and the break-even point is identified on the chart.

If a candidate produces a table rather than a chart, award **[0]**.

- (ii) calculate the change in the break-even level of output if it is estimated that *JnDj*'s fixed costs for 2025 will be 10% higher (*show all your working*). **[2]**

Original break even (Q) = 1500 units

10% increase in fixed costs (\$15000 x 10%) = \$1500. TFC rises from \$15000 to \$16500

BEQ = TFC/contribution à \$16500 / (\$50-\$40) = 1650 units

New BEQ = 1650 units

Change = 150 units (1650 units – 1500 units)

Allow for candidates own figure rule (OFR).

Award [1] for the correct answer and [1] for correct working, up to a maximum of [2].

Award [1] to a candidate who correctly calculates the new BEQ (1650) but goes no further with their answer.

N.B. *if a candidate draws a new TC and new TFC line and uses that to establish the new BEQ quantity then they have not performed the calculation or shown a grasp of contribution – hence “show your working” matters and answers without working but with the correct answer cannot achieve more than [1].*

- (c) Explain **one** reason why *JnDj* chose to offer a five-year guarantee on the ICU video doorbell. **[2]**

Reasons may include:

- A five-year guarantee will:
 - provide *JnDj* with **competitive edge/advantage** as competition in the video doorbell market is growing with low-priced products taking an increasing share of the market / **as rivals only offer a 2-year guarantee** **[2]**.
 - differentiate *JnDj*'s product allowing a higher price to be charged as the guarantee lasts 3 years more than rival doorbells **[2]**.
- *JnDj* are confident in the ICU's quality and believe the guarantee **will help** with **creating the ICU's quality image** **[1]**.

Accept any other relevant reason.

Award [1] for identification of a reason and an additional [1] for explanation and application, up to a maximum of [2].

Section B

3. (a) Define the term *fixed cost*. [2]

Fixed costs are **costs** that do not change **as output changes / remain constant as output changes**.

Accept if the candidate links the costs to changes in sales or sales revenue.

N.B. no application required. Do not credit examples.

Candidates are **not** expected to word their definition **exactly** as above.

Award [1] for a definition to the effect that fixed costs are costs that do not change. Award an additional [1] if the candidate links that idea to changes in output.

- (b) Explain **one** advantage **and one** disadvantage for *WEL* of implementing a premium pricing strategy. [4]

Premium pricing occurs when a product's **price** is **significantly higher than** those of **similar competing products**, as it is **perceived** to be **unique** or of **higher quality**.

Advantages of premium pricing include:

- **profit margins** are **higher**;
- **higher entry barriers** for new competitors;
- it helps to make **customers perceive** the **product as exclusive** and of high quality;
- if successful, it can help *WEL* cover its high fixed costs.

Disadvantages include:

- the relatively **high prices** may **discourage customers**;
- it may be difficult and **expensive** to establish and **maintain** the **brand loyalty** necessary to charge the higher prices;
- competition in the area such as international chain hotels in which *WEL* is located is fierce. Any potential customers who are price sensitive might choose to stay at a less expensive hotel. Some competitors also offer special activities, such as canoeing and archery;
- prices are easily compared as a local website lists all hotel prices.

N.B. application marks for 3(b) are mostly grounded in how competitive the market is and in the web page that posts hotels prices provides transparency.

Accept any other relevant advantage/disadvantage. Do not award for nominal application such as hotel food, tourism as this applies to any hotel.

Do not accept premium prices will increase revenues. Premium prices may actually result in fewer customers.

Mark as 2+2.

Award [1] for a relevant advantage/disadvantage and an additional [1] for application to *WEL*. Award up to a maximum of [2] per advantage or disadvantage.

[2] can not be awarded per advantage/disadvantage if the response lacks either explanation **and / or** application.

For example:

*For an identification or a description of a problem **with or without** application [1].*

*For explanation of a problem with **no** application [1].*

*For explanation of a problem **and** application [2].*

Maximum award overall: [4]

- (c) Explain **one** advantage **and one** disadvantage for *WEL* of taking over the glass-bottomed boat provider. **[4]**

Advantages include:

- Can help **differentiate** *WEL*'s **brand** from competitors, as they are the only ones offering this service. Prevents competitors from offering the same service unless they set up their own glass bottom boat enterprise.
- Gives *WEL* more control over a revenue generating area of the business.
- The glass-bottomed boat rides have become so popular (application to the stimulus).

Disadvantages may include:

- It will **increase operating costs** (including fixed costs, which are already high); *WEL*'s first two years of operation, it frequently faced financial difficulty despite being profitable.
- **Problems of integration** (change management) (that could lead to reducing customer's satisfaction, which *WEL* is trying to improve).

Accept any other relevant advantage/disadvantage.

Mark as 2+2.

*Award [1] for an appropriate advantage/disadvantage and an additional [1] for application to *WEL*. Award up to a maximum of [2] per advantage/disadvantage.*

[2] cannot be awarded per advantage/disadvantage if the response lacks either explanation **and / or application.**

For example:

*For an identification or a description of a problem **with or without** application [1].*

*For explanation of a problem with **no** application [1].*

*For explanation of a problem **and** application [2].*

Maximum award overall: [4]

- (d) Using the data provided in **Table 3** and **Table 4**, and other information in the stimulus, recommend which strategy *WEL* should implement to gain a competitive advantage over competitors. **[10]**

Strategies may include:

- diversification
- various pricing strategies
- growth
- market development
- product development
- various combinations thereof.

Accept any other relevant business strategies.

According to the stimulus, there is potential for the **cost reduction strategy**, which would allow for parity or proximity with rival hotels. Cost reduction for *WEL* can be discussed using the data

on Table 4, which suggests that **small reductions** are possible **in their fixed costs**, and more **significant** ones are possible in their **variable costs**. Not all items carry the same weight, as cost reductions are **more feasible** in **labour** and **energy**, and **less so in marketing**.

There is potential for **differentiation** too, as seen in Table 3, where the **items addressed match** those in the **consumer profile** defined by the board of directors. However, the **scores** are clearly **not good** enough in some aspects **like rooms and prices**.

A **differentiation focus strategy** also has potential, as improving in those aspects where they are **weak** could allow them to **focus** on a **niche market** (target customer was defined by the board of directors) and **charge premium prices**. Cost focus **does not seem** to be a likely **option**.

Clearly, as stated by the CEO in the last paragraph, **they “did not clearly stand out in any of them”**, which is **problematic**. **WEL should clearly define which strategy to follow**, and do so to the best of their abilities.

Accept any other relevant argument and recommendation.

Marks should be allocated according to the markbands on page 3.

4. (a) State **two** features of microfinance. **[2]**

Features of microfinance include:

- Borrowers are usually low income.
- Loan amounts are small.
- Microfinance institutions often provide other financial services, such as deposit accounts and insurance.
- Term of loans is usually short.
- Usually no collateral requirement.
- Women make up the majority of microfinance borrowers.
- Operates in underserved areas bridging the gap between financial institutions and marginalized communities.
- Many microfinance lenders are social enterprises.
- Used by those that have trouble getting loans from banks / are rejected by banks for loans.
- For loans usually made to small businesses / small organizations.
- Most microfinance borrowers are from developing countries.
- It is an external source of finance.

Accept any other relevant feature of microfinance.

N.B. if a candidate raises the points that microfinance borrowers come from disadvantaged groups and that microfinance borrowers are mainly women, award **[2]** as two distinct points were made. However, if a candidate writes something to the effect that “microfinance borrowers are usually from disadvantage groups, such as women,” award **[1]**. In this instance, “women” are exemplification of disadvantaged group and **NOT** a distinct point. We do not award marks of this type of question for exemplification.

Do not accept any assertion about interest rates (being high or being low).

*Award **[1]** for each relevant feature of microfinance up to a maximum of **[2]**. No reference to Wafuki Hardware (WH) needed.*

- (b) (i) Calculate WH's profit for period, **X**, for the year ended 31 December 2023 (show all your working). **[2]**

Sales revenue – cost of sales – expenses – interest – tax = profit for period
 $\$232\,000 - \$142\,000 - \$80\,000 - \$1000 - \$2000 = \7000

Profit for period, X = \$7000

Accept the answer 7 as X is a missing figure from the table with the heading “all figures in \$000s”.

*Award **[2]** if the candidate has the correct answer and shows working, \$ sign not required.*

*Award **[1]** if the candidate has the correct method but an incorrect answer OR if the candidate has the correct answer but does not show working.*

- (ii) Comment on *WH*'s liquidity at 31 December 2023. **[2]**

Current ratio = current assets / current liabilities = \$34 000 / \$16 000 = 2.125

Current assets = Cash + Debtors + Stock = \$7000 + \$4000 + \$23 000 = \$34 000

Current liabilities = Bank overdrafts + Trade creditors = \$2000 + \$14 000 = \$16 000

Acid test = (current assets – stock) / current liabilities = (\$34000 – \$23000) / \$16 000

Acid test = 0.6875

WH's liquidity is deceptive. On the one hand, it has the seemingly strong current ratio of 2.125. However, the acid test ratio is only 0.6875. WH has many of its resources, \$23 000, tied up in stock. The fact that most of WH's sales are on a cash basis allows WH to operate with such limited liquid assets; the business has cash coming in every day that WH is open.

N.B. no marks are to be awarded if a candidate only calculates the CR and/or AT ratios and makes no valid comment about liquidity.

N.B. if a candidate incorrectly calculates the CR or AT ratios and bases their comments on these incorrect ratios, award no marks. OFR does not apply in this question as candidates are not asked to calculate liquidity ratios. Eg if the ATR is calculated as 1.5 with an accompanying comment: "this shows that WH has good liquidity" – this is clearly incorrect and cannot be rewarded.

Award **[1]** for some understanding of the concept of liquidity. Award **[2]** if the candidate demonstrates an understanding of the concept of liquidity and offers some additional commentary or detail providing depth, such as:

- calculating one or both of the liquidity ratios (current ratio and/or acid/quick test ratio) and providing commentary thereon
- mentioning the issue of having a large investment in stock.

- (c) (i) Calculate the expected return, **Y**, for **Option 2** (show all your working). **[2]**

The correct method is that candidates multiple the probabilities by the return from investments, add those three numbers, and then subtract the project cost.

For **Option 2**:

$(\$100\,000 \times 0.4) + (\$50\,000 \times 0.5) + (-\$20\,000 \times 0.1) =$
 $\$40\,000 + \$25\,000 - \$2000 = \$63\,000$

Expected return, Y, for Option 2 = \$63 000 – \$60 000 = \$3000

Award **[2]** if the candidate has the correct answer with \$ sign and shows working. Accept the \$ sign somewhere in their working/answer.

Award **[1]** if the candidate has the correct working but an incorrect answer OR if the candidate has the correct answer and working but no \$ sign. Allow BOD for use of another monetary sign.

Award **[0]** for 3000 on its own.

N.B. do not penalize more than once for sign/unit omission in any one question part (c)(i), (c)(ii).

- (ii) Assuming the average expected annual return on investment from Option 1 remains constant over the five-year period, calculate the payback period, **Z**, for **Option 1** (*show all your working*). **[2]**

Expected return for **Option 1**:

$$(\$40\,000 \times 0.4) + (\$25\,000 \times 0.5) + (\$10\,000 \times 0.1) = \\ \$16\,000 + \$12\,500 + \$1000 = \$29\,500$$

Then,
 $\$29\,500 / 5 \text{ years} = \5900 per year

So, payback period = Project cost / Annual cash flow from project =
 $\$25\,075 / \$5900 = 4.25 \text{ years}$

Payback period, Z, for Option 1 = 4.25 years or four years and three months.

Award marks as follows:

[1] If a candidate **who has shown working** provides a correct procedure (thus, demonstrates an understanding of the underlying concepts) **but** has made an error in calculation or the answer does not include **years/months**.

[1] If a candidate does not show any working and simply writes the answer or does not include units “years/months”.

[2] if a candidate provides the **correct answer with working**. A correct answer must include **years/months**.

N.B. accept **4.25 years or four years and three months**.

- (d) Using the information in the stimulus **and** your calculations in parts (c) (i) and (ii), discuss whether Wangui should choose **Option 1** or **Option 2**. **[10]**

Allow candidate own figure rule (OFR).

Advantages of Option 1 include:

- The **investment** is **small** (\$25 075).
- **Payback period** is **brief** (shorter – 4.25 years).
- “**Downside**” **would not be catastrophic**. *WH* would still be making a profit off the investment and, if financed with debt, payback of loan would still be within *WH*’s ability.
- The **expected return** is **better** (\$1425 more than Option 2).

Disadvantages of Option 1 include:

- **Limited growth** opportunities compared to becoming a small construction company.
- Currently, *WH* is **using 80%** of its **space**. With the **addition** of **equipment** for rent, *WH* will use even **more** of its **building and premises**, which could lead to **overcrowding** and impact *WH*’s ability to grow its core business activities.
- “**Upside**” **profitability** is **not** that **great** and probably **insufficient** to pay for a **new building**, if *WH* had to move to a larger location.

Advantages of Option 2 include:

- **Substantial growth** opportunity compared to the somewhat-niche market of renting construction equipment to small construction companies.
- Though **slightly longer than** for **Option 1**, the **payback period** is relatively brief, only **4.76 years**, or just over **4 years and 9 months**.
- City is growing, and UN predicts continued growth. The **construction sector will grow** to accommodate the additional people and business.
- Becoming a small construction company is a form of forward vertical integration, providing at least one **secure channel for “sales”** (to *WH*) of hardware, wood, and construction supplies.

Disadvantages of Option 2 include:

- Wangui has **limited-to-no experience** as a small construction company.
- Option 2 requires a substantially **larger investment**. (\$60 000 in total, this is \$34 925 more than Option 1).
- “**Downside**” is **significant**. Unless Wangui were willing to take on an equity investor (and could find one), she would have to take out a rather large loan to finance the project. If the economy weakened, *WH* would have a very **difficult time paying back** such a large loan.

Accept any other relevant advantages or disadvantages to Option 1 or Option 2.

Marks should be allocated according to the markbands on page 3.
