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Business management
Standard level
Paper 2

22 October 2024

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

Candidate session number

1 hour 30 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 **[40 marks]**.



Section A

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

1. El Romero (ER)

El Romero (ER) is a guest house that rents out single rooms. In 2025, *ER* will charge an average of \$80 for an overnight stay, which includes meals. The variable costs of items such as food and laundry will be \$30 per overnight stay. The fixed cost of operating the guest house will be \$50 000 per year.

(a) Define the term *fixed cost*.

[2]

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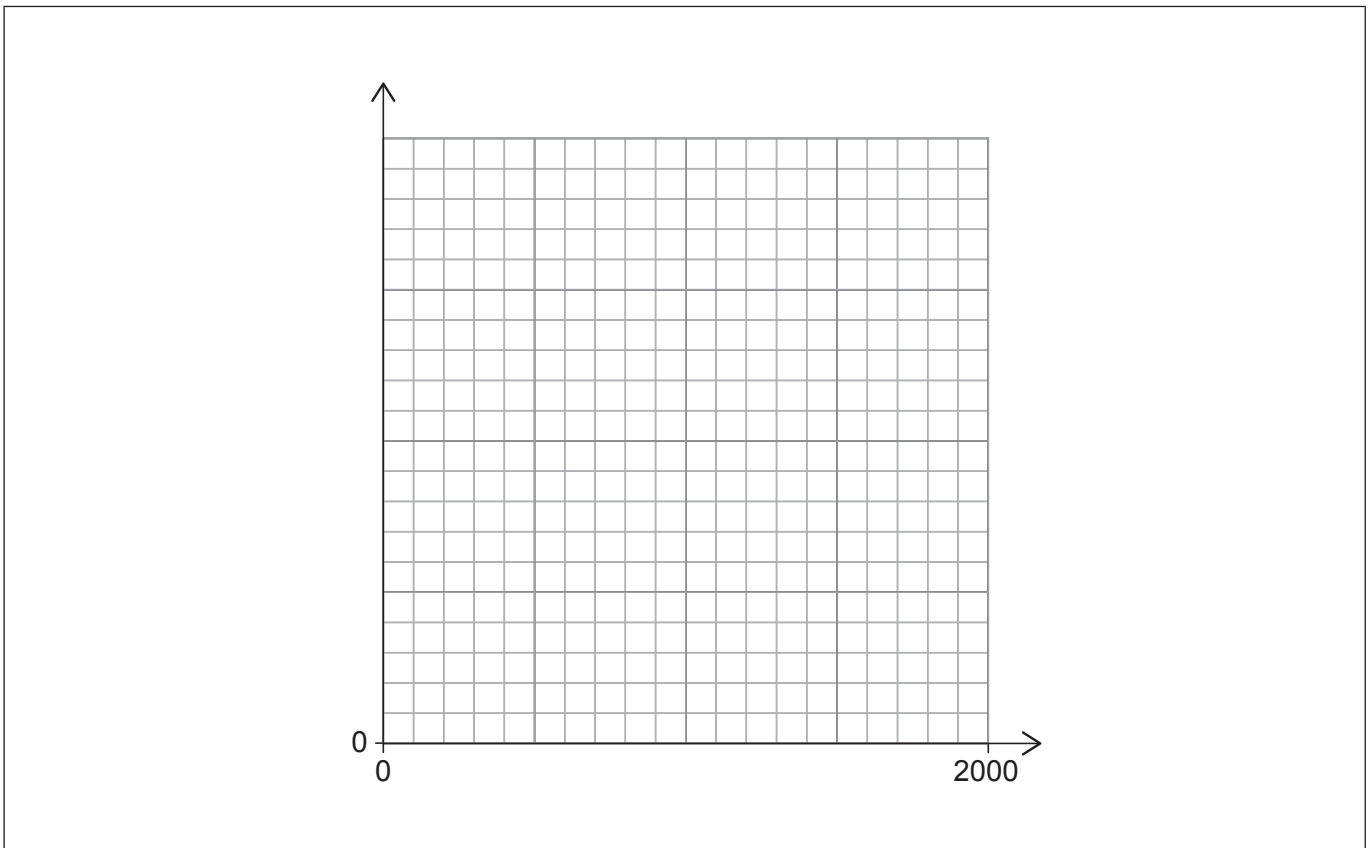
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(b) Construct a fully labelled break-even chart, to scale, for *ER* for 2025.

[4]



(This question continues on the following page)



(Question 1 continued)

- (c) *ER* has forecasted overnight stays in 2025 to be 1460. Calculate *ER*'s forecasted level of profit for 1460 overnight stays in 2025 (*show all your working*). [2]

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- (d) Of the seven available rooms in the guest house, the current average (mean) occupancy per night is four, and *ER*'s occupancy has a standard deviation of one.

Using standard deviation, comment on *ER*'s current average occupancy per night. [2]

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2. **Fritos Food (FF)**

Fritos Food (FF) is a restaurant started by Friya Shah that offers a range of fast food. *FF*'s customers have high brand loyalty, and demand is increasing. Friya is considering expansion, and she has identified three options, which are shown in **Table 1**.

Table 1: Estimated financial data relating to the three expansion options

| | Cost (\$) | Probability | Expected revenue (\$) |
|---|------------------|---|------------------------------|
| Option 1: Renovate the existing restaurant | 35 000 | High returns (0.7) Low returns (0.3) | 80 000 20 000 |
| Option 2: Invest in a new restaurant with the existing product range | 150 000 | High returns (0.7) Low returns (0.3) | 200 000 50 000 |
| Option 3: Invest in a new restaurant and develop a new product range | 190 000 | High returns (0.7) Low returns (0.3) | 320 000 50 000 |

(a) State **two** advantages for a business of having customers with high brand loyalty. [2]

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(Question 2 continued)

- (b) Using **Table 1**, construct a fully labelled decision tree **and** identify the best option for *FF* (*show all your working*). [6]

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20EP05

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(Question 2 continued)

(c) Explain **one** advantage for Friya of using a decision tree.

[2]

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Section B

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

3. Beepa Bakery (BB)

Beepa Bakery (BB) is a for-profit social enterprise. *BB* makes pies, cupcakes and tarts which are sold in three shops it owns in a large city. *BB*'s vision is to impact lives with the "art form of cookery".



BB offers two free annual workshops for school-aged children from low-income communities. The workshops offer instructions on nutritional development, teach basic cooking skills, and promote creativity in the kitchen. *BB* plans to increase the number of free annual workshops to four.

BB also contributes to a community food bank that provides food for low-income families while also preventing food waste.

(a) State **two** advantages of operating as a for-profit social enterprise. [2]

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(Question 3 continued)

Table 2 shows information about the unit cost of producing 40 of BB's pies per day.

Table 2: Information about the unit cost of producing 40 of BB's pies per day

| Pie size | Unit cost of production (\$) | Number of pies made per day |
|------------------|------------------------------|-----------------------------|
| Small (S) | 20 | 4 |
| Medium (M) | 40 | 15 |
| Large (L) | 60 | 13 |
| Extra Large (XL) | 80 | 8 |

(b) Using Table 2:

- (i) calculate the mean cost of production per day for the 40 pies made (show all your working);

[2]

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- (ii) calculate the median cost of production per day for the 40 pies made (show all your working);

[2]

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(Question 3 continued)

- (iii) calculate the modal/mode cost of production per day for the 40 pies made
(no working required).

[1]

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- (c) *BB* wants to launch a bigger pie, the extra extra large (XXL). *BB* plans to make 10 XXL pies per day and estimates a unit cost of production of \$100.

Calculate the effect that this would have on your answer to part (b) (iii)
(no working required).

[1]

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(Question 3 continued)

Figure 1 and Figure 2 present some information about *BB*'s revenue contribution.

Figure 1: Analysis of *BB*'s revenue contribution by product

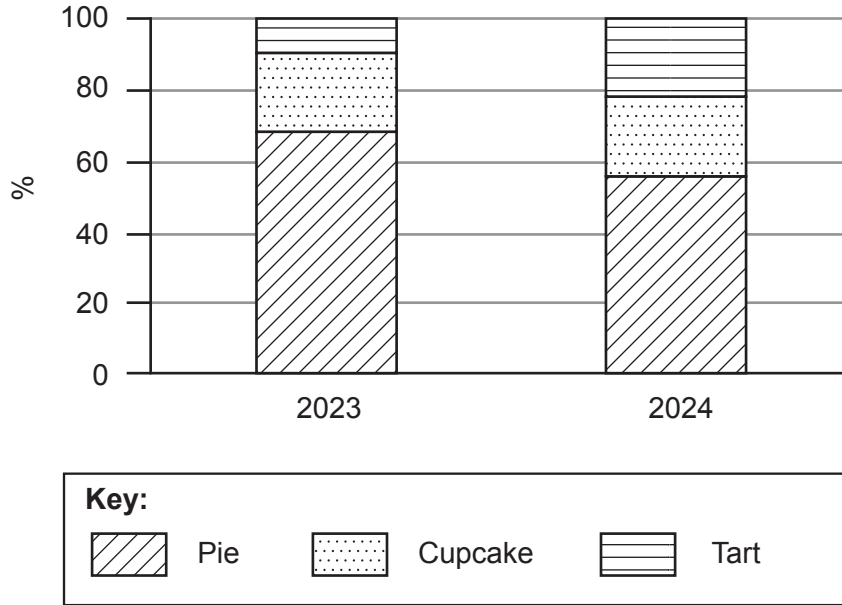
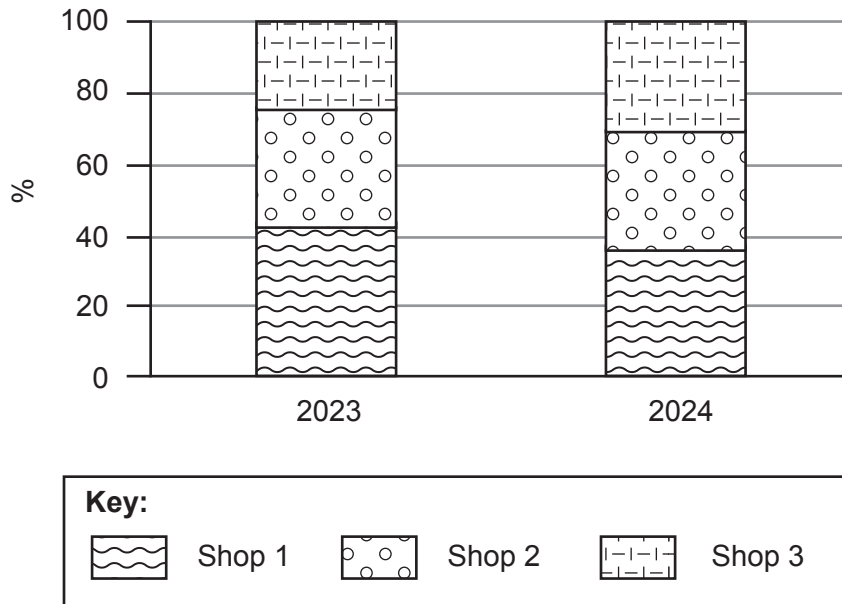


Figure 2: Analysis of *BB*'s revenue contribution by shop



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(Question 3 continued)

(d) Comment on **one** of the two data sets (**Figure 1** or **Figure 2**).

[2]

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According to statista.com, sales in the bakery industry will increase by 10% over the next five years. Thanks to e-commerce, bakeries have a promising future. Additionally, the gig economy provides the bakery industry with a cost-effective way to recruit additional employees during busy seasons or periods of the day.

BB is planning to open two more shops in the city between 2025 and 2028. *BB* will install automated* bakery equipment and will offer employees training to acquire new skills (reskill). As lower-skilled employees leave *BB*, the business will replace them with gig economy employees.

John Cook, *BB*'s managing director, has identified that growth is mainly due to an increase in online sales for in-store collection orders. John believes this "click-and-collect" strategy will result in a reduction in the number of employees needed to serve customers in all *BB*'s shops.

While some employees agree with John's new plans, other employees feel threatened.

* automated: carried out by machines or computers without human control

(e) Using information in the stimulus, discuss strategies that *BB*'s human resource department could use to reduce the impact of change on employees.

[10]

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Answers written on this page
will not be marked.



4. **AkvoBotelo (AB)**

AkvoBotelo (AB) manufactures reusable water bottles. For every water bottle that *AB* sells, it plants a tree. The business is a cooperative owned by its 30 employees, who are also environmental activists.

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

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AB's mission statement is, "To reduce the use of plastic and to make the world greener by planting a tree for every bottle we sell". All of *AB*'s packaging has this mission statement printed on it.

(b) Explain **one** advantage for *AB* of having a mission statement. [2]

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(Question 4 continued)

Table 3 shows forecasted figures for AB.

Table 3: Forecasted figures for AB for the year ending 31 December 2025

| | |
|------------------------------------|-------------|
| Fixed costs | \$1 800 000 |
| Variable cost per water bottle | \$4 |
| Cost of planting a tree | \$5 |
| Selling price of each water bottle | \$15 |
| Number of water bottles produced | 320 000 |

(c) Using **Table 3**:

- (i) comment on the effect on fixed costs if the number of bottles produced decreases to 300 000;

[2]

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- (ii) calculate AB's margin of safety for 2025 (*show all your working*);

[2]

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(Question 4 continued)

- (iii) comment on the effect on the break-even quantity if the selling price of each water bottle increases to \$21.

[2]

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20EP19

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