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Business management
Standard level
Paper 1

23 October 2023

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

1 hour 15 minutes

Instructions to candidates

- Do not open this examination paper until instructed to do so.
- A clean copy of the **business management case study** is required for this examination paper.
- Read the case study carefully.
- A clean copy of the **business management formulae sheet** is required for this examination paper.
- Section A: answer two questions.
- Section B: answer question 4.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[40 marks]**.

Section A

Answer **two** questions from this section.

1. (a) Outline **two** reasons why *BRD* may have chosen external growth rather than internal growth for its expansion (lines 27–28). [4]
(b) Explain how Arnold’s relationship with *BRD*’s employees may have affected productivity at *BRD* (lines 58–72). [6]
2. (a) Outline **two** ways in which *BRD* could change its marketing mix when it switches to making model trains with plastic rather than metal in 2024 (lines 108–110). [4]
(b) Explain the likely impact on *BRD* of changing from batch production to cellular manufacturing (lines 41–56). [6]
3. (a) Outline **two** types of secondary market research that *BRD* could have used to identify the reasons for the decline in sales of model train sets and plastic model kits (lines 114–115). [4]
(b) Explain the likely impact on *BRD* of selling additional share capital to solve its liquidity problem (lines 124–141). [6]

Section B

Answer the following question.

4. *BRD* manufactures *Matchfix* plastic model kits in its Liverpool factory. The *Matchfix* product range was profitable until 2020. The market is competitive, and prices are increasingly important to customers. *BRD* uses a cost-plus (mark-up) pricing strategy and reviews its kit prices regularly. In 2021, the cost of plastic increased by 20 %, with a further increase in 2022 of 25 %. *Matchfix* plastic model kit sales fell in 2021 and again in 2022.

By 2022, 50 % of the Liverpool factory space was unused. The marketing director, Simpson Smith, wants to attract a new market segment. He has suggested two options for this unused space: a science and imagination centre and a railway museum.

- **Option 1: A science and imagination centre.** This would include interactive exhibits, allowing families to experiment with wind, magnets, electricity, and light. Highly trained employees would be needed to assist with experiments.
- **Option 2: A railway museum.** This would display full-size railway engines and rail cars used in the 20th century. A small number of employees would be needed as guides.

For each option, the entrance fee would be £15 per adult, with accompanied children entering for free. *BRD* would also open a café. Fixed costs for the café are forecasted at £25 000 per annum and variable costs at £10 per customer. Simpson has predicted that 80 % of visitors will visit the café, with an average spend per adult of £15. Forecasted costs and visitor numbers for both options are shown in **Table 1** and **Table 2**.

Table 1: Forecasted costs for Option 1 and Option 2

	Setup costs	Annual total variable costs	Annual total fixed costs
Option 1: Science and imagination centre	£500 000	£90 000	£360 000
Option 2: Railway museum	£800 000	£30 000	£50 000

Table 2: Forecasted number of paying visitors for Option 1 and Option 2

	Option 1: Science and imagination centre	Option 2: Railway museum
	Number of paying visitors	
Year 1	30 000	50 000
Year 2	45 000	52 000
Year 3	55 000	55 000
Year 4	63 000	55 000
Year 5	70 000	55 000

(This question continues on the following page)

(Question 4 continued)

- (a) Define the term *market segment*. [2]
 - (b) Explain **one** advantage **and one** disadvantage for *BRD* of using a cost-plus (mark-up) pricing strategy for its *Matchfix* plastic model kits. [4]
 - (c) Calculate:
 - (i) the number of paying café visitors needed for the café to make a profit of £200 000 (*show all your working*); [2]
 - (ii) the profit that *BRD* would make in year 3 from operating the café (*show all your working*). [2]
 - (d) Recommend whether *BRD* should choose **Option 1** (the science and imagination centre) or **Option 2** (the railway museum). [10]
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