



BUS.IN2 Ethical and environmental considerations

AQA 8132 · Calculator allowed · about 55 minutes

Total Marks

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Name: _____ Date: ____ / ____ / ____

Answer ALL questions in the spaces provided. Show your working for any calculation: method marks are available even if your final answer is wrong. Hazelmere Coffee Roasters, used throughout this pack, is a fictional business.

1 Which one of the following best describes 'ethical sourcing'?

- ☐ A) Buying the cheapest possible materials, regardless of how they were produced
- ☐ B) Buying materials in a way that considers the wellbeing of the people and places involved in producing them, such as paying suppliers a fair price
- ☐ C) Only ever buying materials from within the United Kingdom
- ☐ D) Advertising a product using a celebrity endorsement

(Total for Question 1 is 1 mark)

2 Which one of the following is an example of an environmentally friendly business practice?

- ☐ A) Switching from biodegradable packaging to single-use plastic packaging
- ☐ B) Increasing the number of delivery journeys a product makes
- ☐ C) Switching to packaging that breaks down naturally instead of plastic packaging
- ☐ D) Reducing the amount of information given to customers about a product

(Total for Question 2 is 1 mark)

3 State three ways a business could act more ethically or in a more environmentally friendly way.

(Total for Question 3 is 3 marks)

- 4** Hazelmere currently buys 500 kg of conventionally sourced coffee beans a month, at 6 pounds per kg. It is considering switching to Fairtrade-certified beans, at 8 pounds per kg, which guarantee farmers a fair price.

(a) Calculate Hazelmere's current monthly cost of conventionally sourced beans. (2)

.....

(b) Calculate the monthly cost of buying the same 500 kg as Fairtrade-certified beans instead. (2)

.....

(Total for Question 4 is 4 marks)

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- 5** Using your answers to question 4a and question 4b, calculate the extra monthly cost of switching to Fairtrade beans. Show your working.

(Total for Question 5 is 2 marks)

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- 6** Using your answer to question 5, calculate the extra annual cost of switching to Fairtrade beans. Show your working.

(Total for Question 6 is 2 marks)

- 7 Hazelmere also sells 2,000 bags of coffee a month, currently in plastic pouches costing 0.20 pounds each. It is considering switching to biodegradable pouches, which cost 0.35 pounds each.

(a) Calculate the current monthly cost of the plastic pouches. (2)

(b) Calculate the monthly cost of the same 2,000 bags in biodegradable pouches instead. (2)

(Total for Question 7 is 4 marks)

- 8 Using your answers to question 7a and question 7b, calculate the extra monthly cost of switching to biodegradable pouches. Show your working.

(Total for Question 8 is 2 marks)

- 9 Using your answer to question 8, calculate the extra annual cost of switching to biodegradable pouches. Show your working.

(Total for Question 9 is 2 marks)

- 10 Using your answers to question 6 and question 9, calculate the total extra annual cost of switching to both Fairtrade beans and biodegradable pouches. Show your working.

(Total for Question 10 is 2 marks)

- 11** Hazelmere believes that being able to advertise itself as Fairtrade and using biodegradable packaging would let it charge 0.50 pounds more per bag, on the same 2,000 bags a month. Calculate the extra annual revenue this premium price would generate. Show your working.

(Total for Question 11 is 3 marks)

- 12** Using your answers to question 10 and question 11, calculate the net financial effect on Hazelmere of making both changes, and state whether this is a net gain or a net cost. Show your working.

(Total for Question 12 is 2 marks)

- 13** Explain one advantage to Hazelmere of switching to Fairtrade beans and biodegradable packaging.

(Total for Question 13 is 3 marks)

- 14** Explain one commercial pressure against Hazelmere making this change.

(Total for Question 14 is 3 marks)

- 15** Switching to Fairtrade beans and biodegradable packaging would cost Hazelmere an extra 15,600 pounds a year (question 10), while the premium price it could charge would bring in only 12,000 pounds a year (question 11), a net cost of 3,600 pounds (question 12). However, question 13 shows there could be reputational benefits not captured in these figures, while question 14 shows real commercial risks to making the change. Recommend whether Hazelmere Coffee Roasters should switch to Fairtrade beans and biodegradable packaging. Justify your answer using the figures and points made earlier in this pack.

(Total for Question 15 is 9 marks)

Mark scheme · BUS.IN2 Ethical and environmental considerations

Question 1

- **B1** B cao
- **Answer: B**

Question 2

- **B1** C cao
- **Answer: C**

Question 3

- **B1** one acceptable way, e.g. buying Fairtrade or ethically certified materials
- **B1** a second acceptable way, e.g. using biodegradable or recyclable packaging instead of plastic
- **B1** a third acceptable way, e.g. reducing energy use/carbon emissions, or recycling waste materials
- **Answer: Any three, e.g. buying Fairtrade/ethically certified materials; using biodegradable packaging; reducing energy use or carbon emissions; recycling waste.**

Question 4

- (a) **M1** 500 x 6 seen
- (a) **A1** 3,000 pounds cao
- (a) **Answer: 3,000 pounds.**
- (b) **M1** 500 x 8 seen
- (b) **A1** 4,000 pounds cao
- (b) **Answer: 4,000 pounds.**

Question 5

- **M1** 4,000 - 3,000 seen (ft from question 4)
- **A1** 1,000 pounds cao
- **Answer: 1,000 pounds.**

Question 6

- **M1** 1,000 x 12 seen (ft from question 5)
- **A1** 12,000 pounds cao
- **Answer: 12,000 pounds.**

Question 7

- (a) **M1** 2,000 x 0.20 seen
- (a) **A1** 400 pounds cao
- (a) **Answer: 400 pounds.**
- (b) **M1** 2,000 x 0.35 seen
- (b) **A1** 700 pounds cao
- (b) **Answer: 700 pounds.**

Question 8

- **M1** 700 - 400 seen (ft from question 7)
- **A1** 300 pounds cao
- **Answer: 300 pounds.**

Question 9

- **M1** 300 x 12 seen (ft from question 8)
- **A1** 3,600 pounds cao
- **Answer: 3,600 pounds.**

Question 10

- **M1** $12,000 + 3,600$ seen (ft from questions 6 and 9)
- **A1** 15,600 pounds cao
- **Answer: 15,600 pounds.**

Question 11

- **M1** $2,000 \times 12$ seen
- **M1** $24,000 \times 0.50$ seen
- **A1** 12,000 pounds cao
- **Answer: 12,000 pounds.**

Question 12

- **M1** $12,000 - 15,600$ seen (ft from questions 10 and 11)
- **A1** a net cost of 3,600 pounds cao
- **Answer: A net cost of 3,600 pounds ($12,000 - 15,600 = -3,600$).**

Question 13

- **B1** identifies the point, e.g. the change gives Hazelmere a stronger ethical and environmental reputation
- **B1** develops the point, e.g. customers who care about sustainability may choose Hazelmere over rivals, and question 11 shows some are willing to pay a higher price for it
- **B1** links clearly to an outcome, e.g. this could attract new customers and build loyalty, even though question 12 shows it does not fully cover the extra cost from figures alone
- **Answer: The change gives Hazelmere a stronger ethical and environmental reputation, and some customers are willing to pay a higher price for it (question 11), which could attract new customers and build loyalty beyond what the figures alone capture.**

Question 14

- **B1** identifies the point, e.g. question 12 shows the change is a genuine net cost of 3,600 pounds a year based on the figures in this pack
- **B1** develops the point, e.g. price-sensitive customers may simply buy from a cheaper rival that does not use Fairtrade or biodegradable materials, so the assumed extra sales in question 11 may not fully happen
- **B1** links clearly to an outcome, e.g. Hazelmere's profit could fall, particularly if it cannot pass all of the higher cost on through its prices
- **Answer: The change is a genuine net cost of 3,600 pounds a year (question 12), and price-sensitive customers may buy from a cheaper non-Fairtrade rival instead, so the assumed extra sales in question 11 may not fully happen, reducing Hazelmere's profit.**

Question 15

- **Level 1** (1-3): Makes simple, undeveloped comments about the ethical/environmental decision, with little or no use of the pack's figures and no clear recommendation.
- **Level 2** (4-6): Gives a developed argument for or against the switch, using some of the pack's figures, but does not fully weigh both sides or reach a clearly justified recommendation.
- **Level 3** (7-9): Weighs the evidence for and against the switch, using the cost and revenue figures from this pack, and reaches a justified recommendation supported by that analysis.
- **Indicative content:**
 - For switching: question 13 shows the change could strengthen Hazelmere's reputation and attract or retain customers who value ethical and environmental sourcing, a benefit the figures in this pack do not fully capture.
 - For switching: as consumer attitudes shift, the gap between the 15,600 pound extra cost (question 10) and the 12,000 pound extra revenue (question 11) could narrow over time if more customers come to value and pay for the change.
 - Against switching: on the figures given, the change is a genuine net cost of 3,600 pounds a year (question 12), so it makes Hazelmere less profitable unless other benefits materialise.
 - Against switching: question 14 shows price-sensitive customers may simply switch to a cheaper non-Fairtrade rival, meaning the assumed extra sales in question 11 may not fully be achieved, making the net cost worse than 3,600 pounds.
 - Judgement: since the calculated net cost is relatively small (3,600 pounds) against the pack's total figures, and the reputational benefit in question 13 is real even if hard to quantify, a reasonable recommendation is either to go ahead while closely monitoring sales, or to hold back until customer demand for ethical products is confirmed; either judgement is creditable provided it is justified using the figures and points above.