Cambridge International AS & A Level

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**BUSINESS** **9609/23**

Paper 2 Data Response **October/November 2017**

MARK SCHEME

Maximum Mark: 60

**Published**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(a)(i)</td><td>

**Define the term ‘industrial market’.**

<table>
<tr><th>Knowledge and Application</th><th>Marks</th></tr>
<tr><td>A correct definition</td><td>2</td></tr>
<tr><td>A partially correct definition</td><td>1</td></tr>
<tr><td>No creditable content</td><td>0</td></tr>
</table>

A correct definition should cover both of the following:<br>
An explanation of market(s) – sales, trade etc..<br>
An explanation of industrial – to another business, used in the production process, purchased to change or resale

When a business sells (1) to another business (1)

</td><td>2</td></tr>
<tr><td>1(a)(ii)</td><td>

**Briefly explain the term ‘lead time’.**

Award one mark for each point of explanation:

<table>
<tr><td>C</td><td>Example or some other way of showing good understanding</td><td>1 mark</td></tr>
<tr><td>B</td><td>To delivery/finishing production</td><td>1 mark</td></tr>
<tr><td>A</td><td>Time from ordering/starting production</td><td>1 mark</td></tr>
</table>

Lead time is the time between the start and a finish of a process.

Answers could include:<br>
Lead time is the length of time it takes for a firm to receive an order of stock (B) after it has been ordered (A). For example if a firm orders stock on a Tuesday and it arrives on Friday, the lead time is three days (C).

</td><td>3</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(b)(i)</td><td>

**Refer to Table 1. Calculate the profit that JS would make on the supermarket order.**

<table>
<tr><th>Rationale</th><th>Marks</th></tr>
<tr><td>Correct calculation of the profit (with or without $ and with or without correct working)</td><td>3 marks</td></tr>
<tr><td>Correct formula (can be implied by the use of figures) and correct calculation of two appropriate figures</td><td>2 marks</td></tr>
<tr><td>Correct formula or correct calculation of one figure (TVC, TFC, TC per unit)</td><td>1 mark</td></tr>
<tr><td>No creditable content</td><td>0 marks</td></tr>
</table>

**Formula:**

Total revenue – total costs

50 x ($15+$5) = $1000 total variable costs<br>
$1000 + $500 = $1500 total fixed costs<br>
Total costs = $2500<br>
Total revenue = $2750

$2750 – $2500 = $250

**Profit = $250**

</td><td>3</td></tr>
<tr><td>1(b)(ii)</td><td>

**Explain <u>one</u> possible problem of allocating fixed costs for JS.**

<table>
<tr><th>Level</th><th>Knowledge and Application</th><th>Marks</th></tr>
<tr><td>2b<br>**APP+ APP**</td><td>Explanation of one problem of allocating fixed costs in context</td><td>3</td></tr>
<tr><td>2a<br>**APP**</td><td>Identification of one problem of allocating fixed costs in context</td><td>2</td></tr>
<tr><td>1<br>**K**</td><td>Identification of one problem of allocating fixed costs – no context</td><td>1</td></tr>
<tr><td>0</td><td>No creditable content</td><td>0</td></tr>
</table>

Fixed costs do not change as output changes:

These costs may not be directly attributable to the production process and therefore it may be difficult to know which administrative and other fixed costs are due to the supermarket order.

Would these costs be paid even if the supermarket order is not taken? – If so it may not be appropriate to allocate them to the supermarket order.

The allocation of these costs may make the supermarket order appear less profitable and lead JS to make a poor decision.

A problem of allocating fixed costs may be to do with the calculation or forecasting of those fixed costs

</td><td>3</td></tr>
</table>

| Question | Answer | Marks |
|---|---|---|
| 1(c) | **Analyse <u>two</u> advantages to JS of using CAD.** | **8** |

| Level | Knowledge and Application (4 marks) | Marks | Analysis (4 marks) | Marks |
|---|---|---|---|---|
| 2 | Shows understanding of using CAD in context | 3–4 | Good analysis of **two** advantages of using CAD in context | 4 |
| | | | Good analysis of one advantage of using CAD in context | 3 |
| 1 | Shows knowledge of the use of CAD | 1–2 | Limited analysis of **two** advantages of using CAD | 2 |
| | | | Limited analysis of **one** advantage of using CAD | 1 |

*Limited analysis in context: Marks limited to 4+2=6*

Answers could include:

Flexibility – allows JS to design stickers and edit the designs (and allows customers to edit designs) with minimal cost implications. Designs can be sent electronically to customers for approval – this may speed up the lead time from order to production.

Accuracy – CAD may allow the designs to be more accurate and improve the quality of JS's stickers.

Reduced storage space for designs – can save JS costs.

Easier to find previous designs and reproduce past designs/reprints.

It may be quicker to produce designs using CAD than hand drawing – this can reduce costs

Templates can be set up to save time/costs

CAD can be linked with CAM to speed up the production process/less chance for errors.

| Question | Answer | Marks |
|---|---|---|
| 1(d) | **Evaluate suitable payment methods for the employees at JS.** | **11** |

| Knowledge and Application (4 marks) | Marks | Analysis and Evaluation (7 marks) | Marks |
|---|---|---|---|
| | | Justified evaluation based on arguments in context | 7 |
| | | Developed evaluation based on arguments in context | 6 |
| | | An evaluative statement based on argument(s) in context | 5 |
| Shows understanding of two (or more) payment methods in context | 4 | Argument based on the two (or more) payment methods in context | 4 |
| Shows understanding of one payment method in context | 3 | Argument based on the one payment method in context | 3 |
| Shows knowledge of two (or more) payment methods | 2 | Limited analysis of two (or more) payment methods | 2 |
| Shows knowledge one payment method | 1 | Limited analysis of one payment method | 1 |
| No creditable content | | | |

Answers could include:

Possible payment methods:

Time based – currently being used, rewards amount of time, but no allowance for quality of the stickers or the differing working conditions.
Salary – may be appropriate for administrative jobs/design jobs which are task based, but again will not take into account different working conditions or effort put into the job.
Piece rates – useful to motivate workers on the production line but to what extent is one worker responsible for each sticker or group of stickers? Is it possible to separate out the responsibility? Could be used to reward those who work in unfavourable working conditions and who put in more effort.
Commission – useful for sales staff, but to what extent are production workers likely to have any input into sales.
Bonuses – Could be used to reward effort but an objective system would be required otherwise could be divisive.
Profit sharing – Would tie in worker motivation into the bigger picture of JS's performance but how could this improve reward for effort or differing working conditions.
Performance related pay – Would require a system that tied in effort and working conditions to satisfy JS's workers.

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(a)(i)</td><td>Define the term ‘unique selling point (USP)’ (line 6).<br><br>
<table>
<tr><th>Knowledge and Application</th><th>Marks</th></tr>
<tr><td>A correct definition</td><td>2</td></tr>
<tr><td>A partially correct definition</td><td>1</td></tr>
<tr><td>No creditable content</td><td>0</td></tr>
</table>
<br>A unique selling point is something that makes a product stand out from the competitors, such as a phone with a new feature that no other phones have.<br>It is a feature that none of the other businesses have and means the product can be sold for a higher price.</td><td>2</td></tr>
<tr><td>2(a)(ii)</td><td>Briefly explain the term ‘internal growth’ (line 18).<br><br>Award one mark for each point of explanation:
<table>
<tr><td>C</td><td>Example or some other way of showing good understanding, e.g. also known as organic growth</td><td>1 mark</td></tr>
<tr><td>B</td><td>An idea of ‘growth’ – i.e. the increase in size of a business</td><td>1 mark</td></tr>
<tr><td>A</td><td>An idea of ‘internal’ – i.e. through the reinvestment of profits. Increasing sales/stores/outlets</td><td>1 mark</td></tr>
</table>
<br>Exemplar:<br><br>Internal growth is when a business get larger through the use of retained profit. This is usually a slower way to grown compared to external growth.</td><td>3</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)(i)</td><td>

**Refer to Table 2. Calculate the price elasticity of demand if Navpreet changes her price from $24 to $30 per hour**.

<table>
<tr><th>Rationale</th><th>Marks</th></tr>
<tr><td>Correct calculation of the PED (no minus sign required) with or without correct working</td><td>3 marks</td></tr>
<tr><td>Correct formula (may be implied through the use of figures) and correct calculation of % change in price and correct calculation of % change in QD</td><td>2 marks</td></tr>
<tr><td>Correct formula or correct calculation of % change in price or correct calculation of % change in QD</td><td>1 mark</td></tr>
<tr><td>No creditable content</td><td>0 marks</td></tr>
</table>

**Formula:**

$\frac{\text{\% change in QD}}{\text{\% change in P}}$

% change in QD = <u>(–)**20%**</u>
% change in P = **25%**

PED = (–)**0.8**

*Note: an inverted formula is one error repeated as long as there is working to support the answer*

</td><td>3</td></tr>
<tr><td>2(b)(ii)</td><td>

**Explain <u>one</u> way in which PP could make use of price elasticity of demand calculations.**

<table>
<tr><th>Level</th><th>Knowledge and Application</th><th>Marks</th></tr>
<tr><td>2 (APPAPP)</td><td>Explanation of one way PED calculations could be useful in context</td><td>3</td></tr>
<tr><td>2 (APP)</td><td>Identification of one way PED calculations could be useful in context</td><td>2</td></tr>
<tr><td>1 (K)</td><td>Identification of one way PED calculations could be useful</td><td>1</td></tr>
<tr><td>0</td><td>No creditable content</td><td>0</td></tr>
</table>

Answers could include:

Navpreet see that plumbing services are price inelastic.
Navpreet should increase her price – she may make more profit if she increases her prices.
Price is obviously not the most important factor when customers purchase plumbing services.
The inelastic response may be due to Navpreet's USP.
$24 to $30 brings in same amount of revenue (but will probably increase profit. $30 to $36 increases revenue (and presumably profit).

</td><td>3</td></tr>
</table>

| Question | Answer | Marks |
|---|---|---|
| 2(c) | **Analyse <u>one</u> advantage and <u>one</u> disadvantage to Navpreet of taking out a mortgage on her own home to finance PP's expansion.** | **8** |

| Level | Knowledge and Application (4 marks) | Marks | Analysis (4 marks) | Marks |
|---|---|---|---|---|
| 2 | Shows understanding of taking out a mortgage to finance expansion **in context** | 3–4 | Good analysis of one advantage **AND** one disadvantage to Navpreet of taking out a mortgage to finance expansion **in context** | 4 |
| | | | Good analysis of one advantage **OR** one disadvantage to Navpreet of taking out a mortgage to finance expansion **in context** | 3 |
| 1 | Shows knowledge of mortgages **and** expansion | 2 | Limited analysis of one advantage **AND** one disadvantage of a mortgage as a source of finance | 2 |
| | Shows knowledge of sources of finance **or** expansion | 1 | Limited analysis of one advantage **OR** one disadvantage of a mortgage as a source of finance | 1 |

*Limited analysis in context: Marks limited to 4+2=6*
*Annotate advantages on the left and disadvantages on the right*
*Analysis should be about the use of a mortgage NOT expansion*

Answers could include:

Advantages
- Would allow Navpreet to retain control of PP and raise sufficient finance for the lease
- Long term source of finance so would allow Navpreet to repay the majority when the new shop is making a profit
- Relatively (compared to loans) low rate of interest, would reduce repayment costs.

Disadvantages
- Navpreet may lose her house if she is unable to pay back the mortgage with earnings from the new shop
- The bank may not allow Navpreet to take out a mortgage for the amount required
- Navpreet must pay interest on the mortgage and she does not know if the new shop will be successful.

| Question | Answer | Marks |
|---|---|---|
| 2(d) | **Evaluate promotional methods that PP could use to grow in the future.** | **11** |

| Knowledge and Application (4 marks) | Marks | Analysis and Evaluation (7 marks) | Marks |
|---|---|---|---|
| | | Justified evaluation based on argument(s) in context | 7 |
| | | Developed evaluation based on argument(s) in context | 6 |
| | | An evaluative statement based on arguments in context | 5 |
| Shows understanding of **TWO** promotional methods in context | 4 | Argument based on **TWO** promotional methods in context | 4 |
| Shows understanding of **ONE** promotional method in context | 3 | Argument based on **ONE** promotional method in context | 3 |
| Shows knowledge of **TWO** promotional methods | 2 | Limited analysis of **TWO** promotional methods | 2 |
| Shows knowledge of **ONE** promotional method | 1 | Limited analysis of **ONE** promotional method | 1 |
| No creditable content | | | |

*Allow above and below the line as methods*

Answers could include:

Above the line methods

Advertising – Plumbing is likely to remain a local business so national advertising is likely to cost too much and be inappropriate. Local TV, radio, newspapers and magazines may be appropriate and could be targeted to the appropriate market segments.

Below the line methods

Word of mouth – Navpreet has been using this, but unpredictable and unlikely to help further growth

Sponsorship – Navpreet could sponsor a local team/programme etc.. May allow PP to become a more well-known brand

Direct mailing/Leaflets – relatively cheap and puts the contact details for Navpreet into potential customers homes for when needed.

Price promotions – would need to be communicated (perhaps through new shop if it goes ahead).

New shop could be a form of promotion – high street signage, repeat customers etc…

Promotional pricing – sales, discounts etc.

| Question | Answer | Marks |
|---|---|---|
| 2(d) | Branding<br>Navpreet has a USP and could build on this (perhaps with new shop) to make PP a household brand. Nature of the service is that it is not a day to day product, so a brand needs to be known for when it is needed.<br><br>Packaging<br>Only appropriate for products sold through the shop. Could cross advertise using packaging. | |

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