## Cambridge International AS \& A Level

## BUSINESS <br> 9609/22 <br> Paper 2 Data Response <br> October/November 2021 <br> MARK SCHEME

Maximum Mark: 60

## Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the October/November 2021 series for most Cambridge IGCSE ${ }^{\text {TM }}$, Cambridge International A and AS Level components and some Cambridge O Level components.

## Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

## GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:
Marks awarded are always whole marks (not half marks, or other fractions).

## GENERIC MARKING PRINCIPLE 3:

Marks must be awarded positively:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:
Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

## GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:
Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

## Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:
a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)
b DO credit alternative answers/examples which are not written in the mark scheme if they are correct
c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require $n$ reasons (e.g. State two reasons ...).
d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)
e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities
f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).
g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.


## 4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1(a)(i) | Define the term 'fixed cost' (line 19). |  |  | 2 |
|  | Knowledge |  |  |  |
|  | A correct definition |  |  |  |
|  | A partial, vague or unfocused definition |  | 1 |  |
|  | No creditable content |  | 0 |  |
|  | Indicative content <br> AO1 Knowledge and understanding <br> A cost that does not change - as output changes. |  |  |  |
|  | Exemplar | Marks | Rationale |  |
|  | Does not vary when the business produces more | 2 | Both elements covered |  |
|  | It stays the same no matter how much is produced | 2 | Both elements covered |  |
|  | Fixed costs do not change over time | 1 | One element - the point about fixed costs is that they do not change as output changes, not time |  |
|  | They do not vary | 1 | One element |  |
|  | Not linked to sales | 1 | One element - no idea of not changing but has the link to output |  |
|  | Costs which are fixed | 0 | Do not reward 'fixed' as it is a tautology |  |



| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1(a)(ii) | Exemplar | Mark | Rationale |  |
|  | Net profit/revenue x 100. It can be used to compare business performance | 3 | A, B and C. If there is knowledge of a profit margin, then assume the A mark |  |
|  | It is the proportion of revenue that is profit. A $15 \%$ profit margin means that for every $\$ 1$ of revenue, the business makes $\$ 0.15$ profit | 3 | $A, B$ and $C$ |  |
|  | $\frac{\text { Gross profit }}{\text { Revenue }}(\times 100)$ | 2 | A formula gains the $A$ and $B$ marks. Could be expressed as a ratio, not percentage |  |
|  | The proportion of revenue that is profit | 2 | Although there is not an explicit understanding of profit, if a candidate gains the $B$ mark, then they also gain the A mark |  |
|  | It is the difference between costs and revenue | 1 | Understanding of profit, but not the margin |  |
|  | It is how much profit a business makes | 0 | No understanding of profit or the margin |  |
|  | ARA |  |  |  |


| Question | Answer |  | Marks |
| :---: | :---: | :---: | :---: |
| 1(b)(i) | Use Ralph's estimate of the price elasticity of demand (line 10) to calculate the percentage change in demand for printed photographs if the price is reduced by $10 \%$. |  | 3 |
|  | Rationale | Marks |  |
|  | Correct answer with or without correct working or \% | 3 |  |
|  | Attempt made with correct use of figures | 2 |  |
|  | Formula | 1 |  |
|  | No creditable content | 0 |  |
|  | The formula can be assumed through an attempt using correct figures. <br> Content |  |  |
|  | PED $=\frac{\% \text { change in demand }}{\% \text { change in price }} \mathbf{O R} \%$ change in demand in price $\begin{aligned} & -4=\frac{\% \text { change in demand }}{-10 \%} \text { OR \% change in demand } \\ & -4 \times-10 \%=(+) 40 \% \end{aligned}$ <br> OFR if an error is made earlier in the process. <br> Common incorrect answers | \% change <br> (1 mark) <br> (2 marks) <br> (3 marks) |  |


| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1(b)(i) | Answer | Mark | Rationale |  |
|  | 40 (no working) | 3 | A correct answer. \% sign is not required |  |
|  | $-10 \% \times 4$ <br> Change in demand $=$ $-40 \%$ | 2 | The answer should not be negative, but this arises from only one error in the use of figures. First mark for implied use of the formula. An error in the use of figures (4 instead of -4 ) and an OFR mark for the incorrect answer |  |
|  | -40\% (no working) | 0 | This is a wrong answer and with no working it cannot be rewarded |  |
|  | $\frac{-10 \%}{\text { Demand }}=-4$ <br> Change in demand $=$ $2.5 \%$ | 2 | A common mistake. The candidate has inverted the formula. There is an attempt made with the correct figures, so 2 marks |  |
|  | 2.5\% (no working) | 0 | If the candidate gives a wrong answer with no working to back it up, then award no marks |  |
|  | $\begin{aligned} & \$ 100000 \text { (no } \\ & \text { working) } \end{aligned}$ | 0 | An incorrect answer with no working to show how it was obtained |  |
|  | OFR |  |  |  |


| Question | Answer | Marks |
| :---: | :---: | :---: |
| 1(b)(ii) | Explain one way in which Ralph could use price elasticity of demand when making pricing decisions. | 3 |
|  | Level Knowledge and Application Marks |  |
|  | $2 b$ <br> $(A P P+A P$ Explanation of one use of PED when making <br> pricing decisions in context 3 <br> P)   |  |
|  | 2a (APP)Identification of one use of PED when making <br> pricing decisions in context$\quad 2$ |  |
|  | 1a (K) $\quad$ Identification of one use of PED |  |
|  | 0 No creditable content 0 |  |
|  | Do not reward knowledge of PED as it has been rewarded in the previous question. This question is about a use of PED. <br> Also do not reward making pricing decisions, as this is in the question there must be more (i.e. reducing price). <br> Indicative content <br> AO1 Knowledge and understanding <br> Ways of using price elasticity of demand may include: <br> - To know whether to increase or decrease the price to gain higher revenue. <br> - To know whether to offer price discounts/promotions to gain more sales. <br> - To understand if a business could survive/be profitable - could link to the break-even point. <br> - To decide a pricing strategy. <br> AO2 Application <br> - Elasticity of -4 - an elastic response to price. <br> - If Ralph decreases the price of photography printing by $10 \%$, he may gain an increase in sales of $40 \%$ (OFR) - which means he makes more money/profit. <br> - If Ralph increases the price by $10 \%$, sales may fall by $40 \%$ (OFR) which means he makes less money/profit. <br> - Customers come into the SB shop - which means his estimate is likely to be more accurate. <br> - Ralph's main competition is online - which can change often, making his estimate less useful. <br> Application (APP) is likely to come from the context, with developed application (APP+APP) from further use of that context. |  |


| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 1(b)(ii) | Example of how responses should be marked. |  |  |  |
|  | Identification of a way <br> ( K - 1 mark) | Application <br> (APP - 2 marks) | Developed application (APP+APP - 3 marks) |  |
|  | To see if he should increase or decrease the price | In this case it has an elasticity of -4 | which shows an elastic response |  |
|  | To estimate the effect of a price drop | For a $10 \%$ fall, QD will change by $40 \%$ | which will make Ralph more money |  |
|  | ARA |  |  |  |


| Question | Answer |  |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1(c) | Analyse one advantage and one disadvantage to Ralph of introducing job production. |  |  |  |  | 8 |
|  | Level | Knowledge and Application (4 marks) | Marks | Analysis (4 marks) | Marks |  |
|  | 2b | Applies context to understanding of one advantage and one disadvantage of job production | 4 | Good analysis of one advantage and one disadvantage of introducing job production in context | 4 |  |
|  | 2a | Applies context to understanding of one advantage or one disadvantage of job production | 3 | Good analysis of one advantage or one disadvantage of introducing job production in context | 3 |  |
|  | 1b | Shows knowledge of one advantage and one disadvantage of job production | 2 | Limited analysis of one advantage and one disadvantage of introducing job production | 2 |  |
|  | 1 a | Shows knowledge of one advantage or one disadvantage of job production | 1 | Limited analysis of one advantage or one disadvantage of introducing job production | 1 |  |
|  | 0 |  | o credit | le content |  |  |
|  | Annotate disadvant <br> Indicative <br> AO1 Kno <br> Knowledg <br> - high- <br> - meets <br> - great <br> - make <br> Knowledg <br> - high <br> - labou <br> - may <br> - may | marks for the advantag ge in the right-hand mar <br> content <br> ledge and understa of advantages may uality customer's specific n job satisfaction a unique product <br> of disadvantages ma nit cost of production /time intensive proces equire new equipmen quire job redesign | in the rgin. <br> ding lude: <br> ds <br> include <br> raining | -hand margin and m | ks for the |  |


| Question | Answer | Marks |
| :---: | :---: | :---: |
| 1(c) | AO2 Application <br> - SB currently uses batch production but based on individual customer photographs. <br> - SB currently has a low-profit margin. <br> - Idea to introduce framed individual photographs made by job production. <br> - Frames can be made for any sized photograph or picture. <br> - Variety of customer chosen materials. <br> - Requires specialised equipment. <br> - Equipment would cost $\$ 10000$. <br> - Industry is more competitive (online competitors). <br> - Reference to PED (OFR to Qbi). <br> - Current process is capital intensive. <br> AO3 Analysis <br> Advantages may include: <br> - high quality: may be particularly important in framing and to compete against lower priced competitors <br> - meets customer's specific needs: important because each frame will be different, and Ralph will be framing many sizes of photograph/picture <br> - greater job satisfaction: Ralph is a sole trader and may desire a more challenging job <br> - makes a unique product: may provide Ralph with a USP over other online competitors <br> Disadvantages may include: <br> - high unit cost of production: may make Ralph's frames too expensive to compete with the flow-produced frames - may require Ralph to enter into a lease agreement <br> - labour/time intensive process: may take a great deal of Ralph's time (AN) - will he be able to produce at a rate that will be profitable? (DEV) <br> - may require new equipment/training: requires the purchase/lease of new equipment <br> - may require job redesign: may require Ralph to sell his photograph printing equipment - loss of current revenue |  |


| Question | Answer |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1(c) | Examples of how an answer could develop and how it should be annotated. |  |  |  |  |
|  | K | APP | AN | DEV |  |
|  | An advantage may be that Ralph could make unique (K) | photo frames to fit any sized photo (APP) | This means that he can have a higher profit margin (AN) | which could lead to more profit and income for Ralph (DEV) |  |
|  | A disadvantage will be the high cost of producing each frame (K) | because each frame will be tailor-made using the customer chosen materials (APP) | This means that Ralph will need to charge a high price (AN) | and he might lose customers, decreasing his sales revenue (DEV) |  |
|  | ARA |  |  |  |  |


| Question | Answer |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1(d) | Recommend whether Ralph should use leasing or should sell his photograph printing machine as a source of finance for the equipment to make frames. Justify your recommendation. |  |  |  | 11 |
|  | Knowledge and Application (4 marks) | Marks | Analysis and Evaluation (7 marks) | Marks |  |
|  |  |  | Justified recommendation based on argument in context | 7 |  |
|  |  |  | Developed recommendation based on argument in context | 6 |  |
|  |  |  | An evaluative statement/ recommendation based on argument in context | 5 |  |
|  | Applies context to understanding of leasing and applies context to understanding of sale of assets | 4 | Argument based on the use of leasing in context and argument based on sale of assets in context | 4 |  |
|  | Applies context to understanding of leasing or applies context to understanding of sale of assets | 3 | Argument based on the use of leasing in context or argument based on sale of assets in context | 3 |  |
|  | Shows knowledge of leasing and knowledge of sale of assets as a source of finance | 2 | Limited analysis of leasing and limited analysis of sale of assets | 2 |  |
|  | Shows knowledge of leasing or knowledge of sale of assets as a source of finance | 1 | Limited analysis of leasing or limited analysis of sale of assets | 1 |  |
|  | No creditable content |  |  |  |  |
|  | Annotate marks for the leasing in the left-hand margin and marks for the sale of assets in the right-hand margin. |  |  |  |  |


| Question | Answer | Marks |
| :---: | :---: | :---: |
| 1(d) | Indicative content <br> AO1 Knowledge and understanding <br> Knowledge of the two required sources of finance, including: <br> - Leasing is a way of financing the acquisition of assets without actually having to buy it. Leasing involves a finance company purchasing the asset for the business and the business pays a regular (monthly/yearly) fee for use of the asset. Leasing is similar to renting and usually the asset is not ever owned by the business. An external source of finance. <br> - Sale of assets is when a business sells off its assets and the cash generated is used as a source of finance for the business. An internal source of finance. <br> AO2 Application <br> Application of leasing may include: <br> - specialised equipment to frame individual photographs - may require maintenance which will be covered in a lease agreement <br> - Ralph may still be able to continue printing photographs <br> - five-year lease <br> - $\$ 400$ per month <br> - $\$ 400 \times 12$ months $=\$ 4800$ per year <br> - $\$ 4800 \times 5$ years $=\$ 24000$ in total <br> Application of sale of assets may include: <br> - Sell photograph printing machine for at least $\$ 10000$ - based on an estimate of what he can sell it for. <br> - Ralph will be unable to continue his current business of printing photographs. <br> - Ralph would have full ownership of the specialised equipment, with no additional costs of ownership. <br> - Ralph may need to pay for maintenance/breakdown of machine - whole business will be based on this. <br> AO3 Analysis <br> Analysis of leasing may include: <br> - No upfront cost - but a monthly cost of $\$ 400$ - may be particularly useful while Ralph is building up the business. <br> - Fixed cost for five years - but it would work out significantly more expensive than outright purchase $-\$ 400 \times 60$ months $=\$ 24000$, compared to $\$ 10000$. <br> - Maintenance and breakdown would be covered for the five-year term of the lease - reduces uncertainty for Ralph. <br> - Ralph would be able to upgrade after five years - to better equipment which may allow him to increase his profit margin. |  |


| Question | Answer |  |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1(d) | Analysis of sale of asset may include: <br> - Cheaper (\$10 000) than leasing (\$24000) - increases the overall profit of the business. <br> - No longer able to provide photography printing - loss of current sales far riskier. <br> - Ralph would be responsible for maintenance and breakdown costs may lead to unexpected costs and have an impact on profit. <br> - Ralph may be unable to find a buyer for his photography printing machine, especially since the market has moved online - may mean this is an unsuitable source of finance. <br> AO4 Evaluation <br> - A recommendation about whether Ralph should choose leasing or sell his photography machine as a source of finance for the equipment to make the frames. <br> - A judgement over the relative suitability of the chosen sources of finance. <br> - Elements that the recommendation/judgement could depend upon, including the selling price of the photograph printing machine, the terms of the lease, the forecast demand for the frames, the forecast demand for printed photographs, the competition in the framing market, etc. <br> - Weighing up of the impacts on Ralph of the recommended source(s) of finance. <br> Examples of how an answer could develop and how it should be annotated. |  |  |  |  |  |
|  | K | APP | AN | DEV | EVAL |  |
|  | Leasing involves paying a monthly fee (K) | In this case Ralph would pay $\$ 400$ per month for five years (APP) | That is a greater cost to Ralph than purchasing outright (AN) | Because it would be \$14 000 more, reducing Ralph's profit (DEV) | Ralph should choose to sell his printing machine (EVAL) because the level of competition in his current market is already |  |
|  | Selling the photograph printing machine would mean he no longer has it (K) | Which <br> means <br> Ralph can't <br> continue <br> his current <br> printing <br> business <br> (APP) | This is a much bigger risk for Ralph than leasing (AN) | However, it is $\$ 14000$ cheaper so he is able to make a bigger profit (DEV) | may be no market for his printing machine if he waits (EVAL). It really depends on how confident Ralph is about the likely success of the new business venture (EVAL) |  |
|  |  |  |  |  |  |  |


| Question | Answer |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2(a)(i) | Define the term 'objective’ (line 13). |  |  |  | 2 |
|  | Knowledge |  |  | Marks |  |
|  | A correct definition |  |  | 2 |  |
|  | A partial, vague or unfocused definition |  |  | 1 |  |
|  | No creditable content |  |  | 0 |  |
|  | Indicative content <br> A01 Knowledge and understanding <br> - Specific and measurable goals which a business sets out to achieve. <br> A correct definition should include: <br> - an idea that an objective is an aim/goal/target (allow any similar term) <br> - that a business (or a stakeholder) wants to achieve/reach/obtain (allow any similar term). |  |  |  |  |
|  | Exemplar | Marks | Ration |  |  |
|  | The aims that a business wants to achieve | 2 | Both eleme covered |  |  |
|  | The targets a business wants to reach | 2 | Both eleme covered |  |  |
|  | What an owner is aiming to do | 2 | Both elemen |  |  |
|  | The long-term aims which can be about profit, sales, or CSR | 1 | One elemen is no idea th business is achieve them | - there <br> a <br> ying to |  |
|  | What a business wants to achieve | 1 | One elemen idea of an a | $\begin{aligned} & \text { - no } \\ & m \end{aligned}$ |  |
|  | Objectives are the business objectives that a business has | 0 | Tautology |  |  |
|  | ARA |  |  |  |  |


| Question | Answer | Marks |
| :---: | :---: | :---: |
| 2(a)(ii) | Explain the term 'private limited company' (line 1). <br> Award one mark for each point of explanation: | 3 |
|  | Rationale $\quad$ Marks |  |
|  | C Application of a private limited company to an <br> example or some other way of showing good <br> understanding 1 |  |
|  | B Understanding of a feature unique to a private <br> limited company 1 |  |
|  | A $\quad$ Understanding of feature(s) of a company ${ }^{\text {a }}$ |  |
|  | Must have $A$ and $B$ marks before awarding the $C$ mark. <br> Indicative content <br> A01 Knowledge and understanding <br> Features of a company including: <br> - an incorporated business <br> - shares can be sold/owners are shareholders <br> - limited liability <br> - separate legal identity <br> - continuity <br> - must make accounts available to everyone <br> Features unique to a private limited company including: <br> - cannot sell shares on a public stock exchange <br> - do not need to publish accounts (just make available) <br> - may only be sold to family and/or friends <br> AO2 Application <br> Application of a private limited company, such as: <br> - an example of a private limited company, such as Jaguar, Lifestyle International, etc. (Do not reward repetition from the data, i.e. 'AB is a private limited company'.) <br> - application of how any of the K\&U points might apply to a business, e.g. a private limited company not being able to sell shares on the stock market might restrict its ability to raise finance <br> - application of further knowledge of a private limited company, such as continuity, legal personality, limited liability |  |


| Question | Answer |  | Marks |
| :---: | :--- | :---: | :--- |
| 2(a)(ii) | Exemplar | Marks | Rationale |
|  | A business with shares but they <br> cannot be sold on the stock market. <br> This limits their sources of finance | 3 | All elements covered |
|  | A limited liability business that does <br> not have to publish its accounts so the <br> competitors cannot see them | 3 | All elements covered |
|  | Sells shares but not on the stock <br> exchange | 2 | A and B marks only |
|  | 1 | Only the A mark <br> (many times) |  |
|  | AB is a private limited company | 0 | No K\&U, just <br> repetition from the <br> data |


| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 2(b)(i) | Calculate the profit made from selling standard and advanced services in April. |  |  | 3 |
|  | Rationale |  | Marks |  |
|  | Correct answer(s) with or without correct working or \$ |  | 3 |  |
|  | - Correct calculation of total revenue and total costs for both services <br> - Correct calculation of the total profit of standard or advanced services <br> - Correct calculation of the profit from one standard and one advanced service |  | 2 |  |
|  | - Formula <br> - Correct calculation of one total revenue or one total cost figure <br> - Correct calculation of the profit from one advanced or one standard service |  | 1 |  |
|  | No creditable content |  | 0 |  |
|  | Indicative content <br> Formula: revenue - total costs or (price - total costs per unit) x quantity |  |  |  |
|  | Standard services | Advanced services |  |  |
|  | $\$ 250-(\$ 50+\$ 60)=\$ 140$ (profit from one standard service) <br> $\$ 140 \times 1000=\$ 140000$ (profit from all standard services) | $\$ 400-(\$ 60+\$ 100)=\$ 240$ (profit from one advanced service) <br> $\$ 240 \times 200=\$ 48000$ (profit from all advanced services) |  |  |
|  | $1000 \times \$ 250=\$ 250000$ (total revenue from standard services) <br> $(\$ 50+\$ 60) \times 1000=\$ 110000$ (total cost of standard services) <br> $\$ 250000-\$ 110000=\$ 140000$ (profit from all standard services) | $200 \times \$ 400=\$ 80000$ (total revenue from advanced services) <br> $(\$ 60+\$ 100) \times 200=\$ 32000$ (total cost of advanced services) <br> $\$ 80000-\$ 32000=\$ 48000$ (total profit from all advanced services) |  |  |
|  | $\$ 140000+\$ 48000=\$ 188000$ (total profit from all services) \$188 000 (3 marks) or \$140 000 and $\$ 48000$ (3 marks) |  |  |  |


| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 2(b)(i) | Common incorrect answers |  |  |  |
|  | Answer | Mark | Rationale |  |
|  | 188000 (no working) | 3 | A correct answer, \$ not required |  |
|  | 140000 and 48000 | 3 | A correct answer, \$ not required |  |
|  | 140000 | 2 | The calculation of only standard services profit, \$ not required |  |
|  | 48000 | 2 | The calculation of only standard services profit, \$ not required |  |
|  | \$140 + \$240 = \$380 | 2 | Correct calculation of profit from one standard and one advanced service |  |
|  | $\begin{aligned} & 1000 \times \$ 250= \\ & \$ 250000 \\ & 200 \times \$ 400= \\ & \$ 80000 \\ & \$ 250000+\$ 80000 \\ & =\$ 330000 \end{aligned}$ | 1 | Only calculation of total revenue, needs total costs for 2 marks |  |
|  | $\begin{aligned} & \$ 110000+\$ 32000 \\ & =\$ 142000 \end{aligned}$ | 1 | Only calculation of total costs, needs total revenue for 2 marks |  |
|  | \$550 (no working) | 0 | Only the revenue from one standard and one advanced service, not the total. Also no working to back this up |  |



| Question | Answer |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: |
| 2(b)(ii) | Example of how responses should be marked. |  |  |  |
|  | Knowledge of problem of allocating indirect costs ( K - 1 mark) | Application (APP - 2 marks) | Developed application (APP+APP - 3 marks) |  |
|  | It may be difficult to know the true level of indirect cost that should be allocated to each product | The standard service only has an allocation of \$60 | But it may take as much administration as the advanced service |  |
|  | Each service will be sold using the same branding which is part of the indirect costs | But the advanced service is allocated $\$ 40$ more in indirect costs | And this might make the advanced service seem less profitable |  |
|  | ARA |  |  |  |



| Question | Answer | Marks |
| :---: | :---: | :---: |
| 2(c) | AO2 Application <br> - AB repairs and maintains motorcycles <br> - Nine garages <br> - Highly qualified mechanics <br> - Two types of service: standard and advanced <br> - May be possible to 'upsell' from standard to advanced services <br> - AB sells five times as many standard services compared to advanced services <br> - Higher profit margin for advanced services <br> AO3 Analysis <br> - Sales promotion: no outlay required (AN) - may focus on upselling from standard services to advanced, meeting the objective of increasing advanced sales (DEV) - however, may reduce sales of standard services (DEV). <br> - Direct marketing and direct mail: can be focussed on customers who may have purchased services from AB in the past which can increase the chance of targeting the right customers (AN) - reduces the cost of promotion, increasing profits (DEV). <br> - Public relations (PR): articles about AB in local newspapers may target the local market which increases the chances of successful promotion (AN) - however, there is no guarantee that the articles will show $A B$ in a positive light (DEV). <br> - Sponsorship: of local/national sports teams close to branches of $A B$ may link AB to a successful team leading to increased sales (AN) however, if the team does badly then AB may suffer from being associated with the team, leading to decreased sales (DEV). <br> - Personal selling: upselling advanced services increases sales of a more profitable service (AN) - which could lead to a higher average profit margin and increased total profit (DEV). <br> - Branding and merchandising: toys of motorbikes branded with AB, pens, etc., may get passed around and be seen by a large number of people (AN) - however, there may be a large initial cost with no guarantee of success (DEV). <br> - Packaging: AB may be able to put stickers on motorcycles which have been serviced by AB and which could be seen by many potential customers (AN) - however, owners may not want to have the stickers, meaning they throw them away, wasting the money spent to produce them (DEV). <br> - Telemarketing: direct calling of potential/existing customers of AB may increase sales (AN) - however, the cost is likely to be high and may not be targeted on the right market, wasting time and money (DEV). <br> - Trade fairs and exhibitions: may allow AB to team up with other local businesses (for example, tyre garages) leading to cross promotion of the services (AN) - increasing sales of all services with minimal cost (DEV). |  |


| Question | Answer |  |  | Marks |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 2(c) | Examples of how an answer could develop and how it should be annotated. |  |  |  |  |
|  | K | APP | AN | DEV |  |
|  | Sponsorship (K) | Of a sports team <br> that competes <br> near one of AB's <br> nine garages <br> (APP) | This could lead <br> to the <br> supporters of <br> the team seeing <br> the AB brand <br> every week <br> when their team <br> plays, <br> increasing sales <br> for AB (AN) | However, AB <br> may have to pay <br> a large amount <br> to sponsor the <br> team and the <br> audience may <br> not have a <br> motorcycle, <br> leading to a <br> waste of AB's <br> marketing <br> budget (DEV) |  |
|  |  | Direct mail (K) | AB could send <br> emails to all of <br> their previous <br> customers <br> because they <br> know that they <br> are most likely <br> to own a <br> motorcycle <br> (APP) | These previous <br> customers are <br> likely to <br> purchase <br> services from <br> AB, increasing <br> sales (AN) | And since many <br> vehicles need a <br> yearly service, it <br> may build up a <br> loyal customer <br> base who repeat <br> purchase from <br> AB often (DEV) |


| Question | Answer |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2(d) | Recommend a new payment method for the mechanics at AB. Justify your recommendation. |  |  |  | 11 |
|  | Knowledge and Application (4 marks) | Marks | Analysis and Evaluation (7 marks) | Marks |  |
|  |  |  | Justified evaluation based on argument in context | 7 |  |
|  |  |  | Developed evaluation based on argument in context | 6 |  |
|  |  |  | An evaluative statement based on argument in context | 5 |  |
|  | Applies two pieces of context to understanding of a new payment method(s) | 4 | Argument based on two impacts of payment method(s) in context | 4 |  |
|  | Applies one piece of context to understanding of a new payment method(s) | 3 | Argument based on one impact of payment method(s) in context | 3 |  |
|  | Shows two pieces of knowledge about a new payment method(s) | 2 | Limited analysis of two impacts of payment method(s) | 2 |  |
|  | Shows one piece of knowledge about a new payment method(s) | 1 | Limited analysis of one impact of payment method(s) | 1 |  |
|  | Do not reward time-based payment methods as these are repetition of the case and not a new method. <br> Candidates can gain all the marks from one payment method or more than one method. |  |  |  |  |


| Question | Answer | Marks |
| :---: | :---: | :---: |
| 2(d) | Indicative content <br> A01 Knowledge and understanding <br> Knowledge of payment methods, including: <br> - Salary - a set payment for the completion of a set of tasks. Does not vary based on time/output. <br> - Piece rates - payment per item of output. <br> - Commission - a reward for sales, usually as a percentage of sales/profit. <br> - Bonuses - a payment to reward the best employees. <br> - Profit sharing - a reward based on the level of profit to link employee pay to success of the business. <br> - Performance related pay - linking the business/employee performance to the amount paid. <br> AO2 Application <br> - AB repairs and maintains motorcycles <br> - Nine garages <br> - Highly qualified mechanics <br> - Two types of service: standard and advanced <br> - Higher profit margin for advanced services <br> - Motivation of the mechanics is low <br> - Mechanics believe that they are not paid well <br> - Working conditions are dirty and noisy <br> - Currently use time-based payment based on hours worked <br> - Some mechanics believe current pay system rewards lazy workers <br> - Current pay does not take into account level of difficulty of different jobs. <br> AO3 Analysis <br> Analysis of leasing may include: <br> - Salary: could be varied for each employee based on experience/skill, increasing motivation of those who have higher skills (AN) - however, likely to be seen as unfair as current method and therefore increasing cost with no increase in revenue (DEV). <br> - Piece rates: may reward speed increasing the number of services that $A B$ can perform and increase revenue (AN) - but could reduce quality which may ruin AB's reputation which is important for a service (DEV). <br> - Commission: may reward sales and encourage the upselling of standard to advanced service, increasing the profit of AB (AN) however, since services seem to have a fixed price this again would not reward complexity or quality of work, demotivating the mechanics (DEV). <br> - Bonuses: could be used to reward harder work/skill increasing the number of and/or quality of AB's services and increasing revenue (AN) - but may be divisive amongst workforce leading to more demotivation and a lack of quantity or quality (DEV). <br> - Profit sharing: may be used to reward hardest worker/those with greater skill, motivating the mechanics to produce more (AN) - however, may not account for how much each worker really contributes to the overall profit (DEV). <br> - Performance related pay: may reward hardest workers leading to increased sales (AN) - but might not reward the complexity of the task, in which case it may demotivate and be seen as unfair (DEV). |  |


| Question | Answer |  |  |  |  | Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2(d) | AO4 Evaluation <br> - A recommendation about a new payment method for the mechanics at $A B$. <br> - A judgement over the relative suitability of the chosen payment method. <br> - Elements that the recommendation/judgement could depend upon, including: the AB's budget, AB's profitability, the expected increase in sales from a motivated workforce, the profit margin of each of the types of services, the reaction of the mechanics, the payment system/level at similar businesses (competitors). <br> - Weighing up of the impacts on the mechanics and $A B$ of the recommended new payment method. <br> - Weighing up of the likely advantages/disadvantages of the new payment system against the advantages/disadvantages of the current (time-based) system. <br> Examples of how an answer could develop and how it should be annotated. |  |  |  |  |  |
|  | K | APP | AN | DEV | EVAL |  |
|  | AB could pay their mechanics using a piece rate (K) | This would mean paying them for each service they complete on a motorcycle (APP) | This will reward the mechanics who work hardest because they will earn more and increase the capacity of AB (AN) | This means that $A B$ can sell more services leading to increased profit (DEV) | A piece rate system of payment may be a suitable replacement for AB's time-based system (EVAL). This is because it overcomes one of the mechanics' biggest concerns that lazy workers are currently |  |
|  | However, piece rate rewards quantity not quality (K) | And a service business like AB needs a good reputation so that customers feel their motorcycle is safe (APP) | If the services are rushed, then customers might start to complain and seek their money back (AN) | This will damage AB's reputation and could lead to a significant loss of sales and profit (DEV) | same as those who work hard (EVAL). <br> However, its suitability depends on whether AB can ensure the mechanics do not cut corners and give poor quality services (EVAL) |  |
|  | ARA |  |  |  |  |  |

