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Cambridge Assessment International Education

Cambridge IGCSE™

BUSINESS STUDIES **0450/22**

Paper 2 Case Study **February/March 2023**

MARK SCHEME

Maximum Mark: 80

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 February/March 2023 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

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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.

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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.

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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.

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0450/7115/0086 Business Studies – Paper 2 Annotations

Annotation	Description	Use
Tick	Tick	Indicates a point which is relevant and rewardable (used in part (a) questions).
Cross	Cross	Indicates a point which is inaccurate/irrelevant and not rewardable.
BOD	Benefit of doubt	Used when the benefit of the doubt is given in order to reward a response.
TV	Too vague	Used when parts of the answer are considered to be too vague.
REP	Repetition	Indicates where content has been repeated.
NAQ	Not answered question	Used when the answer or parts of the answer are not answering the question asked.
APP	Application	Indicates appropriate reference to the information in the context.
OFR	Own figure rule	If a mistake is made in a calculation, and the incorrect figure that results from the mistake is used for subsequent calculations.
SEEN	Noted but no credit given	Indicates that content has been recognised but not rewarded.
L1	Level 1	Used in part (b) questions to indicate where a response includes limited knowledge and understanding.
L2	Level 2	Used in part (b) questions to indicate where a response has a more detailed discussion and contains some evidence of justification.
L3	Level 3	Used in part (b) questions to indicate where a response includes a well-justified recommendation.

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Question	Answer	Marks
1(a)	**Explain <u>one</u> advantage and <u>one</u> disadvantage to RW of using flow production.** One mark for each advantage/disadvantage (max 1 adv/max 1 disadv). Award a maximum of three additional marks for **each** explanation of the advantage/disadvantage of flow production, **one of which must be applied to this context**. Advantages could include: • High output of a standardised product – potential increase in sales – possibly higher revenue and profit • Unit costs are kept low – allowing prices to be lower – increases competitiveness • More advanced technology may be used – may be operated 24/7 – increases output • May allow purchasing economies of scale – bulk buying discounts – lower unit costs of producing each product • Time saved in moving goods around the factory – all operations carried out on one production line/unlike batch production Disadvantages could include: • Reduces motivation – can be very repetitive for production workers – less efficient / more likely to leave • May lead to high storage requirements – increases costs of storage for inventories / finished product – possibly lower profit • If one machine breaks, then production may be halted – due to interconnected tasks in the production process meaning output cannot proceed if any of the stages are not operating – higher costs as workers paid and not producing any output • Possibly high capital costs – machinery/new technology may be very expensive – may need to borrow to finance purchase of capital For example: A high level of output can be produced (1) of paint for wooden furniture manufacturers (app) leading to a potential increase in sales (1) and possibly higher revenue and profit for the business (1). **Application** could include: paint; wooden furniture; furniture manufacturers; 100 skilled employees; 1 million tins of paint produced; public limited company; specialist shops; new factory; importing raw materials; maintain the machinery.	**8**

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

Consider how the following <u>three</u> changes may affect RW. Which change is likely to have the most effect on RW's revenue? Justify your answer.

- **Changes in consumer tastes and fashions**
- **Increase in consumer incomes**
- **Decrease in the price of competitors' products**

<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of two or more changes. Well-justified conclusion.
Candidates discussing all three changes in detail, in context and with a well-justified conclusion including why the alternative changes are rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of at least one change.
Judgement with some justification / some evaluation of choices made.
Candidates discussing two or more changes in detail and applying them to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.
Limited ability to discuss the changes with little/no explanation.
Simple judgement with limited justification / limited evaluation of choices made.
Candidates outlining the three changes in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table>

</td><td>**12**</td></tr>
</table>

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(b)</td><td>Relevant points might include:
<table>
<tr><td>Changes in consumer tastes and fashions</td><td>• Increased demand for paint in bright colours such as yellow – may need to increase production of this paint and reduce production of darker colours – increased cost in the short term as production lines changed – long term will meet customer needs so revenue will increase
• May need to increase market research costs to ensure they are meeting changed customer needs – market-orientated business should lead to increased sales – with the new factory increasing output then sales revenue could potentially double
• May introduce new products to meet changing customer needs leading to increasing costs</td></tr>
<tr><td>Increase in consumer incomes</td><td>• May result in increased sales of wooden garden furniture – therefore increased demand for paint from garden furniture producers – increased revenue for RW
• May lead to lower sales revenue of paint from retail customers/shops if less paint is sold to consumers with higher incomes – as may pay someone else to improve their homes</td></tr>
<tr><td>Decrease in the price of competitors' products</td><td>• May lead to decreased sales of RW paint as now less price competitive – decreases revenue
• If the competitors’ paint is lower quality, then may not have much impact on sales of RW
• May need to reduce prices to remain competitive</td></tr>
<tr><td>Conclusion as to the most effect on RW's revenue</td><td>• The changes in tastes and fashions are likely to have the most effect on revenue if RW produces more bright colours then sales are likely to increase and then so will revenue. The increase in incomes may have little effect if consumers do not buy more paint as paint isn’t bought very often. The decrease in the price of competitors' paint will have little effect if it is less expensive paint and not aimed at the same target market.
• The increase in incomes will have the most effect on revenue as more customers are spending time in their gardens and are buying more garden furniture. This will increase demand from furniture producers and hence sales of paint will increase and also will RW’s revenue.
• The decrease in the price of competitors products will have the most effect on revenue as there is likely to be a decrease in demand for RW’s paint due to it being less price competitive. This will lead to revenue decreasing as fewer furniture manufacturers choose to buy their paint from RW.</td></tr>
</table></td><td></td></tr>
</table>

Question	Answer	Marks
2(a)	**Explain <u>two</u> possible problems for RW of the business growing.** One mark for each problem (max 2) Award a maximum of 3 additional marks for **each** explanation of a problem caused by the business growing – **one of which must be applied to this context.** Relevant answers might include: • Larger businesses are more difficult to control – some employees may not feel part of the business and may not work effectively – leading to increased unit/average costs • May lead to poor communication – instructions do not get to the right person/get distorted – errors in work carried out / instructions are not carried out correctly • Lack of experience in managing larger business – could lead to poor decision making – leading to higher costs / lower sales / loss of reputation • Problems in financing the expansion – if loans are taken then this may increase cost – due to interest payments / may need to issue more share capital • Poor morale / commitment – as employees may not feel valued by management in a much larger organisation – leading to lower motivation and lower productivity • Over expansion/expand too quickly – may lead to liquidity problems – initially cash outflows may rise faster than cash inflows / output produced but demand not sufficient – leads to unsold inventory and increased storage costs • Weak coordination • Difficulties in recruiting sufficient skilled employees For example: When RW becomes a larger business it may be more difficult to control (1). Some employees may not feel part of the business as they rarely see any of the senior managers and hence may not work effectively (1) leading to increased unit costs (1) and higher prices of the paint (app). **Application** could include: paint; wooden furniture; furniture manufacturers; 100 skilled employees; $50 million to build the factory; operating 2 factories; need to take out a loan; 200 employees; 2 million tins produced; new factory.	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)</td><td>Using Appendix 2 and other information, consider the <u>three</u> possible locations for RW's new factory. Which location should RW choose? Justify your answer.
<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of two or more locations. Well-justified recommendation.
Candidates discussing all three locations in detail, in context and with well justified recommendation including why the alternative locations are rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of at least one location.
Judgement with some justification / some evaluation of choices made.
Candidates discussing two or more locations in detail and applying it to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.
Limited ability to discuss the locations with little/no explanation.
Simple judgement with limited justification /limited evaluation of choices made.
Candidates outlining three locations in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table></td><td>12</td></tr>
</table>

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)</td><td>Relevant points might include:
<table>
<tr><th>Location</th><th>Advantages</th><th>Disadvantages</th></tr>
<tr><td>Location A</td><td>• Near to existing factory so easier to move some existing workers across to train the new factory workers – lowers training costs
• Near to customers reducing transport costs of final paint products
• Easier to access customers and understand their preferences – quicker to respond to changes in tastes and fashions – increasing sales
• Near to existing factory – improved communication with senior managers – increasing efficiency
• Skilled workers in the local area – reducing training costs</td><td>• Most raw materials and paint tins need to be transported to this site – increasing transport costs
• High wage rates likely paid in the local area to skilled workers – increases total wage costs
• Higher cost of land leading to higher expenses</td></tr>
<tr><td>Location B</td><td>• Near port so lowers cost of transporting imported raw materials – 75% of raw materials are imported – easily accessible from ships in the port
• High levels of unemployment in the local area leads to lower wage rates paid – lowering total wage costs
• Paint tins are available locally – reducing the transport costs</td><td>• No skilled workers in the local area – increases training costs of new employees
• Increased cost to transport finished products to market in Main City</td></tr>
</table></td><td></td></tr>
</table>

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>2(b)</td><td>
<table>
<tr><td>Location</td><td>Advantages</td><td>Disadvantages</td></tr>
<tr><td>Location C</td><td>• Land is low cost – reducing capital required for the factory
• Government grants are available in the area for businesses employing workers – possibly reducing overall costs and increasing profit
• Nearer to the market than Location B/ the port</td><td>• Imported raw materials still have to be transported to this location – increasing transport costs
• Power supply less reliable – frequent power cuts – production may be stopped – loss of output</td></tr>
<tr><td>Recommendation</td><td colspan="2">Justification may include:
• Location A should be chosen as it is near the existing factory, and it can have close links with the head office improving communication and paint production employees can be moved to this factory to reduce training costs by using on-the-job training. Whereas location B does not have skilled workers available making recruitment more difficult and location C has frequent power cuts disrupting production and reducing output.
• Location B should be chosen as 75% of the raw materials to manufacture paint is imported and this location is near the port so reduces the cost of transporting raw materials to the factory. The cost will also reduce as the paint tins are produced here.
• Location C should be chosen as the land and wage costs are low. Production costs will be kept low at this location and then the finished paint just needs to be transported to the market in Main City.</td></tr>
</table>
</td><td></td></tr>
</table>

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Question	Answer	Marks
3(a)	**Explain <u>four</u> legal controls that may benefit employees.** One mark for each legal control (max 4). Award a maximum of one additional mark for **each** explanation of the benefit to employees from the legal control. There are no application marks for this question. Answers could include: • Protected against unfair dismissal – employees will have security of employment • Will be provided with an employment contract – so that employees will know what they will be paid/hours worked • Protected against discrimination – so employees are treated equally • Health and safety laws protects against injury at work – so employees do not get hurt • Should be paid at least the legal minimum wage – prevents strong employers exploiting workers • Restriction on maximum hours that can be worked • Redundancy payments made For example: Should be paid at least the legal minimum wage (1) which prevents strong employers exploiting workers by paying wages that do not meet their basic needs (1).	**8**

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>Consider the advantages and disadvantages of <u>two</u> methods of training, other than induction training, which RW could use for the employees in the new factory. Which of these two methods should RW choose? Justify your answer.
<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of two training methods. Well-justified recommendation.
Candidates discussing both training methods in detail, in context and with well-justified recommendation including why the alternative training method is rejected should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of at least one training method.
Judgement with some justification / some evaluation of choices made.
Candidates discussing one or more training methods in detail and applying it to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.
Limited ability to discuss the training methods with little/no explanation.
Simple judgement with limited justification /limited evaluation of choices made.
Candidates outlining both training methods in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table></td><td>12</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>Relevant points might include:
<table>
<tr><th>Training method</th><th>Advantages</th><th>Disadvantages</th></tr>
<tr><td>On-the-job training</td><td>• Individual tuition given – tailored to the specific needs of the tasks on the flow production line
• Ensures some production of paint – helps to supply paint to shops
• It is relatively cheap compared to off-the-job training – as no need to pay expenses such as course fees
• Meets specific needs of business – training can be the exact way RW wants the tasks to be carried out</td><td>• Trainer may pass on bad habits – leading to more errors
• Trainer will not be as productive whilst training – slows down output of paint from the experienced worker doing the training
• Employees might not learn the most up-to-date methods – hence may be less efficient – making RW less competitive
• Employees may make mistakes whilst learning – creating faulty waste products – increases costs from paint being discarded</td></tr>
<tr><td>Off-the-job training</td><td>• A broad range of skills can be taught for paint production
• May be carried out in the evening outside of work time – so there may be no loss of output
• Often uses expert trainers – gives better training to employees – may be more efficient at carrying out tasks on the flow production line
• Most up-to-date techniques are learnt – makes RW more competitive than other paint manufacturers</td><td>• May be no output of paint produced whilst training – so wages may be paid but no work done in the new factory whilst training
• May make it easier for employee to find alternative employment – employee leaves and increased cost to recruit and train other employees
• Costs are usually higher than on-the-job training</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>3(b)</td><td>
<table>
<tr><td>Training method</td><td>Advantages</td><td>Disadvantages</td></tr>
<tr><td>Recommendation</td><td colspan="2">Justification may include:
• On-the-job training may be better to choose as it will allow workers to keep working at the same time as being trained and therefore still producing some output of paint. This will save RW costs of training as it uses existing paint production workers to carry out the training. It may not be able to afford to send all 100 workers on training courses, which may not be specific to the needs of RW and likely to be expensive.
• Off-the-job training may be better to choose as it will lead to higher quality training being given to the new employees. These are skilled jobs on the flow production line and the employees need to maintain the reputation of RW. There may not be sufficient experience amongst existing workers to train the employees at RW’s new factory.</td></tr>
</table>
</td><td></td></tr>
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Question	Answer	Marks
4(a)	**Explain <u>two</u> external benefits and <u>two</u> external costs from RW's factories.** One mark for each external benefit /cost (max 2 external benefits / max 2 external costs). Award a maximum of 1 additional mark for **each** explanation **in the context of RW** of the external benefit/cost. External benefits could include: • Jobs created – in the local area from the building of the second factory • Local businesses that supply RW may increase sales – of paint tins produced at location B • Taxes will be paid to the government – from the profits earned selling 1 million tins • Roads improved by the government to aid increased traffic – also benefits businesses including furniture manufacturers • Improved infrastructure (other than roads) – helps to ensure power supplies are reliable if Location C is chosen External costs could include: • Pollution caused by waste products – which are put into local rivers • Noise from the construction of the new building – as flow production lines are built • Increased road congestion in the local area – from more lorries transporting paint for wooden products to the market For example: An external benefit will be the tax paid to the government (1) out of the profit made by RW from selling paint (app). **Application** could include: paint; wooden furniture; furniture manufacturers; 100 skilled employees; 1 million tins of paint produced; public limited company; specialist shops; new factory; importing raw materials; maintain the machinery.	**8**

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4(b)</td><td>Using Appendix 3 and other information, consider whether the following forecasts are likely to be accurate after the new factory has been built. Do you think RW will achieve its forecast profit? Justify your answer.
<table>
<tr><th>Level</th><th>Description</th><th>Marks</th></tr>
<tr><td>3</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of whether two or more forecasts are likely to be accurate.
Well-justified conclusion.
Candidates discussing in detail whether three forecasts are likely to be accurate, in context and with well-justified conclusion of whether or not the forecast profit will be achieved should be rewarded with the top marks in the band.</td><td>9–12</td></tr>
<tr><td>2</td><td>Sound application of knowledge and understanding of relevant business concepts using appropriate terminology.
Detailed discussion of whether one or more forecasts are likely to be accurate.
Judgement with some justification / some evaluation of decision made.
Candidates discussing in detail whether two or more forecasts are likely to be accurate and applying them to the case should be rewarded with the top marks in the band.</td><td>5–8</td></tr>
<tr><td>1</td><td>Limited application of knowledge and understanding of relevant business concepts.
Limited ability to discuss whether the forecasts are likely to be accurate with little/no explanation.
Simple judgement with limited justification /limited evaluation of the decision made.
Candidates outlining whether the three forecasts are likely to be accurate and in context should be rewarded with the top marks in the band.</td><td>1–4</td></tr>
<tr><td>0</td><td>No creditable response.</td><td>0</td></tr>
</table></td><td>12</td></tr>
</table>

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<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>4(b)</td><td>Relevant points might include:
<table>
<tr><td>Revenue forecast $20 million</td><td>• Likely to have increased as new factory increase the output of paint per year to 2 million tins – may increase revenue to $20m assuming all output is sold, and the price remains the same
• Price of the paint may have to be reduced to sell the higher output – revenue may not increase by $10m
• Extent of the increase in revenue depends on price elasticity of demand for paint in country X if prices change
• It will take time for the factory to reach full capacity and the output is unlikely to all be sold</td></tr>
<tr><td>Cost of sales forecast $6 million</td><td>• Should increase to $6m assuming there are no economies of scale – and factory is producing the maximum output of 1 million tins of paint per year
• If bulk buying discounts apply, then this will increase by a smaller amount than $3m due to purchasing economies of scale</td></tr>
<tr><td>Expenses forecast, including interest paid, $12 million</td><td>• Likely to be higher than $12m as there will be interest payments on the bank loan for $50m taken out to build the new factory
• Higher set up costs such as training costs may raise the expenses above $12m in the first year after the factory has been built</td></tr>
<tr><td>Conclusion</td><td>Justification may include:
• RW is likely to achieve a profit of $2m or more after the factory has been built because the new factory will enable RW to increase output and revenue from the sales of paint. The larger business is likely to benefit from economies of scale such as purchasing economies and therefore the cost of sales may not double. This may lead to a higher gross profit than $14m. However, this will assume that all the output is sold, and the revenue is as forecast. Training costs may be lower if on-the-job training is used and therefore expenses may be lower than forecast. Overall the profit may be higher than $2m.
• RW is not likely to achieve a profit of $2m after the factory has been built because RW is unlikely to be able to double its paint sales in one year and therefore the revenue is unlikely to increase significantly. Higher interest payments from the bank loans taken out to build the factory will need to be paid leaving higher expenses and a lower profit.</td></tr>
</table></td><td></td></tr>
</table>