

Cambridge International AS & A Level

BUSINESS**9609/32**

Paper 3 Business Decision-making

May/June 2024**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 May/June 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **24** printed pages.

PUBLISHED**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 descriptions 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.

PUBLISHED**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.

Guidance on using levels-based marking

Marking of work should be positive, rewarding achievement where possible, but clearly differentiating across the whole range of marks, where appropriate.

The examiner should look at the work and then make a judgement about which level statement is the best fit. In practice, work does not always match one level statement precisely so a judgement may need to be made between two or more level statements.

Once a best-fit level statement has been identified, use the following guidance to decide on a specific mark:

- If the candidate's work **convincingly** meets the level statement, award the highest mark.
- If the candidate's work **adequately** meets the level statement, award the most appropriate mark in the middle of the range.
- If the candidate's work **just** meets the level statement, award the lowest mark.
- L1, L2 etc. must be clearly annotated on the response at the point where the level is achieved.

Assessment objectives

AO1 Knowledge and understanding

Demonstrate knowledge and understanding of business concepts, terms and theories.

AO2 Application

Apply knowledge and understanding of business concepts, terms and theories to problems and issues in a variety of familiar and unfamiliar business situations and contexts.

AO3 Analysis

Analyse business problems, issues and situations by:

- using appropriate methods and techniques to make sense of qualitative and quantitative business information
- searching for causes, impact and consequences
- distinguishing between factual evidence and opinion or value judgement
- drawing valid inferences and making valid generalisations

AO4 Evaluation

Evaluate evidence in order to make reasoned judgements, present substantiated conclusions and, where appropriate, make recommendations for action and implementation.

Question	Answer				Marks
1 Analyse <u>two</u> advantages to SF of using flexible employment contracts.	Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 4 marks	8
		2		3–4 marks Developed analysis <ul style="list-style-type: none"> Developed analysis that identifies connections between causes, impacts and/or consequences of two points. Developed analysis that identifies connections between causes, impacts and/or consequences of one point. 	
		1 1–2 marks <ul style="list-style-type: none"> Knowledge of two relevant points is used to answer the question. Knowledge of one relevant point is used to answer the question. 	1–2 marks <ul style="list-style-type: none"> Application of two relevant points to a business context. Application of one relevant point to a business context. 	1–2 marks Limited analysis <ul style="list-style-type: none"> Limited analysis that identifies connections between causes, impacts and/or consequences of two points. Limited analysis that identifies connections between causes, impacts and/or consequences of one point. 	
		0 0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	

Question	Answer	Marks
1	<p>Note:</p> <ul style="list-style-type: none"> Only reward advantages. If more than two advantages are referred to, reward the best two. L2AN (3 marks) is possible for just one point made. <p>All annotation (K APP AN L2) should be in the left margin.</p> <p>Indicative content</p> <p>AO1 Knowledge and understanding</p> <p>Definition of relevant terms (max K 1 mark)</p> <ul style="list-style-type: none"> Flexible contracts include making use of temporary, part-time and zero-hour contracts rather than permanent full-time contracts. <ul style="list-style-type: none"> Temporary contracts offered for fixed period. Part-time contracts; employees contracted to work for less hours than full-time. Zero-hour contracts; no guaranteed minimum number of hours. It can allow employees to work at home/pick the hours they work. <p>Knowledge of benefits (max K 2 marks)</p> <ul style="list-style-type: none"> Benefits include: <ul style="list-style-type: none"> Can reduce fixed costs. Adjusting labour costs flexibly. More employees available to cover sickness. SF can check efficiency of employees before offering full-time contracts. Motivating for employees because can pick their own hours/allows employees to work at home. <p>AO2 Application</p> <p><i>Limited application, APP applies knowledge to SF once.</i></p> <p><i>Developed application, APP+APP applies knowledge to SF twice.</i></p> <p><i>Max one APP for application for the first advantage and max one APP for application for the second advantage.</i></p> <ul style="list-style-type: none"> Seasonal nature of farming. At harvest time more demand for labour on the farms to harvest crops. Competitive markets that SF operates in. There is seasonal demand for Sosoy Ice Cream so there is a need to vary production. SF employs peripheral employees on temporary or zero-hour contracts linked to seasonal production. 	

Question	Answer	Marks
1	<p>AO3 Analysis</p> <p><i>Limited analysis</i> AN – candidate shows one link in the chain of analysis.</p> <p><i>Developed analysis</i> L2AN – candidate shows two or more links in the chain of analysis.</p> <ul style="list-style-type: none"> Temporary contracts enable SF to respond flexibly to changing labour needs over time reducing costs for the business AN. Reducing costs will enable SF to set competitive prices AN which can attract customers and therefore increase market share L2AN. SF will be able to call in workers when needed if other employees are sick or on maternity leave thus ensuring that production is not disrupted AN. Zero-hour contracts enables SF to increase production quickly in response to unexpected changes in demand meeting customer needs more efficiently and boosting sales AN which may result in an increase in profit L2AN. Motivating for employees because they can pick their own hours/allow employees to work at home this would lead to lower employee turnover AN which would reduce costs for SF. L2AN <p>Accept all valid responses.</p>	

Question	Answer				Marks
2	Analyse two problems SF may experience when implementing total quality management (TQM).				8
Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 4 marks		
2			<p>3–4 marks Developed analysis</p> <ul style="list-style-type: none"> Developed analysis that identifies connections between causes, impacts and/or consequences of two points. Developed analysis that identifies connections between causes, impacts and/or consequences of one point. 		
1	<p>1–2 marks</p> <ul style="list-style-type: none"> Knowledge of two relevant points is used to answer the question. Knowledge of one relevant point is used to answer the question. 	<p>1–2 marks</p> <ul style="list-style-type: none"> Application of two relevant points to a business context. Application of one relevant point to a business context. 	<p>1–2 marks Limited analysis</p> <ul style="list-style-type: none"> Limited analysis that identifies connections between causes, impacts and/or consequences of two points. Limited analysis that identifies connections between causes, impacts and/or consequences of one point. 		
0	<p>0 marks No creditable response.</p>	<p>0 marks No creditable response.</p>	<p>0 marks No creditable response.</p>		

Question	Answer	Marks
2	<p>Note:</p> <ul style="list-style-type: none"> Only reward problems/disadvantages. If more than two problems are referred to, reward the best two. L2AN (3 marks) is possible for just one point made. <p>All annotation (K APP AN L2) should be in the left margin.</p> <p>Indicative content</p> <p>AO1 Knowledge and understanding</p> <p>Definition of relevant terms (max K 1 mark)</p> <ul style="list-style-type: none"> TQM is a method of quality assurance that aims to involve all employees in quality improvements. Encourages workers to get it right first time and to achieve zero defects. <p>Knowledge of problems when implementing TQM (max K 2 marks)</p> <ul style="list-style-type: none"> Problems may include: <ul style="list-style-type: none"> Cost of training for employees. Resistance from employees. Short term negative impacts on productivity and or quality as changes are embedded. Lack of managerial skills of motivation, delegation of decision making, teamwork, communication and coordination. Requires a change in culture within the business. Impact of making quality inspectors redundant. Time consuming – with a reason e.g. training staff, changing culture, change policies, employees checking work. Nature of the product – TQM on ice cream – how to implement quality checks? <p>AO2 Application</p> <p><i>Limited application, APP applies knowledge to SF once.</i></p> <p><i>Developed application, APP + APP applies knowledge to SF twice.</i></p> <p><i>Max one APP for application for the first problem and max one APP for application for the second problem.</i></p> <ul style="list-style-type: none"> SF's use of flexible contracts including part-time, temporary and zero-hours. Temporary workers employed at harvest time for short period. Current approach focuses on detection of quality problems rather than prevention. Factory operating close to capacity. Limited training given to peripheral employees. Unskilled workers – more training required. 	

Question	Answer	Marks
2	<p>AO3 Analysis</p> <p><i>Limited analysis</i> AN – candidate shows one link in the chain of analysis.</p> <p><i>Developed analysis</i> L2AN – candidate shows two or more links in the chain of analysis.</p> <ul style="list-style-type: none"> Difficult to change culture of business as many employees are on flexible contracts and may therefore lack commitment to the business AN. Cost of training will be relatively high as workers on temporary contracts not in the business for long. Each new group of temporary workers at harvest time each year will need training, increasing costs AN. No need for quality inspectors so may need to make redundancies AN adding to costs of implementation and causing concerns over job security which could reduce productivity L2AN. In short-term may result in increase in defective products as adjusting to TQM approach takes time. This could result in short-term customer dissatisfaction and impact sales negatively AN and therefore reducing profit L2AN. <p>Accept all valid responses.</p>	

Question	Answer	Marks															
3(a)	<p>Refer to Table 1.1. Calculate for quarter 1, 2023, the seasonal variation.</p> <p>Seasonal variation = $16 - 23.75 = -7.75$ OR -7750 OR (-7.75) (1)</p> <p>Note: No mark for 7.75 OR 7750.</p>	1															
3(b)	<p>Refer to Table 1.1. Calculate for quarter 2, 2023, the centred quarterly moving average.</p> <table border="1"> <thead> <tr> <th>Note</th> <th>Answer</th> <th>Mark</th> </tr> </thead> <tbody> <tr> <td>Correct answer</td> <td>25 OR 25 000</td> <td>3</td> </tr> <tr> <td>Correct method but no correct final answer OR Calculation of 8 period moving total</td> <td> $98+102 = 200$ OR $98\ 000 + 102\ 000 = 200\ 000$ OR $200 / 8$ OR $200\ 000 / 8$ Note: 200 OR 200 000 written on its own is 0 marks Accurate method must be shown </td> <td>2</td> </tr> <tr> <td>Calculation of one or more correct 4 period moving totals OR Knowledge of correct method</td> <td> $20 + 16 + 27 + 35 = 98$ OR/AND $16 + 27 + 35 + 24 = 102$ OR $4 \text{ period MA} = 8 \text{ period moving total} / 8$ OR $102 / 4 = 25.5$ </td> <td>1</td> </tr> <tr> <td>Zero marks</td> <td>No creditable response For example, just provides incorrect 4 period moving total</td> <td>0</td> </tr> </tbody> </table> <p>For anything other than the full mark answer there should be relevant working.</p>	Note	Answer	Mark	Correct answer	25 OR 25 000	3	Correct method but no correct final answer OR Calculation of 8 period moving total	$98+102 = 200$ OR $98\ 000 + 102\ 000 = 200\ 000$ OR $200 / 8$ OR $200\ 000 / 8$ Note: 200 OR 200 000 written on its own is 0 marks Accurate method must be shown	2	Calculation of one or more correct 4 period moving totals OR Knowledge of correct method	$20 + 16 + 27 + 35 = 98$ OR/AND $16 + 27 + 35 + 24 = 102$ OR $4 \text{ period MA} = 8 \text{ period moving total} / 8$ OR $102 / 4 = 25.5$	1	Zero marks	No creditable response For example, just provides incorrect 4 period moving total	0	3
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Question	Answer					Marks																
3(c) Evaluate the usefulness to SF of sales forecasting.	<table border="1" data-bbox="316 282 1888 1373"> <thead> <tr> <th data-bbox="316 282 428 409">Level</th><th data-bbox="428 282 765 409">AO1 Knowledge and understanding 2 marks</th><th data-bbox="765 282 1102 409">AO2 Application 2 marks</th><th data-bbox="1102 282 1439 409">AO3 Analysis 2 marks</th><th data-bbox="1439 282 1888 409">AO4 Evaluation 6 marks</th></tr> </thead> <tbody> <tr> <td data-bbox="316 409 428 790">3</td><td data-bbox="428 409 765 790"></td><td data-bbox="765 409 1102 790"></td><td data-bbox="1102 409 1439 790"></td><td data-bbox="1439 409 1888 790"> <p>5–6 marks Developed evaluation in context</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made in the business context. • Developed evaluative comments which balance some key arguments in the business context. </td></tr> <tr> <td data-bbox="316 790 428 1092">2</td><td data-bbox="428 790 765 1092"> <p>2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p> </td><td data-bbox="765 790 1102 1092"> <p>2 marks Developed application of relevant point(s) to the business context.</p> </td><td data-bbox="1102 790 1439 1092"> <p>2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.</p> </td><td data-bbox="1439 790 1888 1092"> <p>3–4 marks Developed evaluation</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made. • Developed evaluative comments which balance some key arguments. </td></tr> <tr> <td data-bbox="316 1092 428 1373">1</td><td data-bbox="428 1092 765 1373"> <p>1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p> </td><td data-bbox="765 1092 1102 1373"> <p>1 mark Limited application of relevant point(s) to the business context.</p> </td><td data-bbox="1102 1092 1439 1373"> <p>1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.</p> </td><td data-bbox="1439 1092 1888 1373"> <p>1–2 marks Limited evaluation</p> <ul style="list-style-type: none"> • A judgement/conclusion is made with limited supporting comment/evidence. • An attempt is made to balance the arguments. </td></tr> </tbody> </table>	Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 2 marks	AO4 Evaluation 6 marks	3				<p>5–6 marks Developed evaluation in context</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made in the business context. • Developed evaluative comments which balance some key arguments in the business context. 	2	<p>2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p>	<p>2 marks Developed application of relevant point(s) to the business context.</p>	<p>2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.</p>	<p>3–4 marks Developed evaluation</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made. • Developed evaluative comments which balance some key arguments. 	1	<p>1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p>	<p>1 mark Limited application of relevant point(s) to the business context.</p>	<p>1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.</p>	<p>1–2 marks Limited evaluation</p> <ul style="list-style-type: none"> • A judgement/conclusion is made with limited supporting comment/evidence. • An attempt is made to balance the arguments. 	12
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Question	Answer					Marks
3(c)	0	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	

All annotation (K APP AN L1 EVAL L2 EVAL L3 EVAL) should be in the left margin.

Indicative content

AO1 Knowledge and understanding

Limited knowledge K will be demonstrated through knowledge of sales forecasting or knowledge of the usefulness or limitations of sales forecasting to SF.

Developed knowledge K + K will be demonstrated through knowledge of sales forecasting and knowledge of the usefulness or limitations of sales forecasting to SF.

- Sales forecasting involves making a prediction of future sales.
- Time series analysis is a method of forecasting based on extrapolation from past data.
- Benefits of sales forecasting include:
 - Contribution to workforce planning
 - Planning purchase of resources
 - Greater accuracy in cash flow forecasting
 - Aids operational decisions such as need to increase capacity
 - Aids decisions about pricing
- Drawbacks of sales forecasting include:
 - Inaccuracy
 - Dynamic market
 - Doesn't take into account qualitative factors
 - Past can't predict the future
 - Moving averages are based on past data

AO2 Application

Limited application, APP applies knowledge to SF once.

Developed application, APP + APP applies knowledge to SF twice.

- Reference to current capacity utilisation of over 90%.
- Need for forecast of sales if start to export to country D.
- Role of market reports and market research in forecasting.

Question	Answer	Marks
3(c)	<ul style="list-style-type: none"> Identifying likely demand for tofu and Sosoy Ice Cream. Identifying employees needed in factory and decision about employment contracts to use. Inability to control the weather. <p>AO3 Analysis</p> <p><i>Limited analysis</i> AN – candidate shows one link in the chain of analysis.</p> <p><i>Developed analysis</i> L2AN – candidate shows two or more links in the chain of analysis.</p> <ul style="list-style-type: none"> Helps ensure efficient use of labour and machinery helping to control costs of production AN and therefore increase profit L2AN. Contributes to creating cash flow forecast which will help ensure that SF has sufficient finance in place to deal with future needs AN. Sales forecasts for entering country D will help evaluate whether break-even can be achieved AN and therefore whether exports are likely to be successful L2AN. Because the market is dynamic it could lead to misallocation of resources such as having too many peripheral employees in the factory AN which would lead to increased costs L2AN. <p>AO4 Evaluation</p> <p><i>Limited evaluation</i> EVAL – limited supported judgement and/or a weak attempt at evaluative comment.</p> <p><i>Developed evaluation</i> L2EVAL – supported judgement and/or reasonable evaluative comment.</p> <p><i>Developed evaluation in context</i> L3EVAL – supported judgement in context and/or reasonable evaluative comment in context.</p> <ul style="list-style-type: none"> Using 4 period moving average fits the data well as there are clear seasonal variations ensuring that the technique is more likely to give reliable results. Unexpected changes in the external environment such as entry of a new competitor will result in the predictions being incorrect and therefore less useful in making the best decisions. TSA relies on future events behaving as in the past so may not be reliable as markets are dynamic. May be advisable to introduce an element of probability to the forecasts – what if analysis? The longer the time frame the less useful the forecast is because there are more likely to be external events that impact the forecast. Using simple moving averages and a line of best fit may be too simplistic. Usefulness is limited if managers don't use the sales forecast to make decisions. Should be used in conjunction with qualitative data and current market data to improve usefulness. <p>Accept all valid responses.</p>	

Question	Answer		Marks
4(a)	Refer to Table 1.2. Calculate the accounting rate of return (ARR) of automating production.		4
	Note	Answer	Mark
	Calculation of ARR Working and % not required Correct rounding must be applied	$0.4 / 1.75 \times 100 = 22.86(\%) \text{ OR } 22.9 \text{ OR } 23$	4
	Calculation of average profit and average investment OR An incorrect answer with one mistake allowing OFR for final stage Not subtracted capital cost OR Incorrect rounding OR Subtracted residual value rather than adding (OFR)	$0.4 \text{ OR } \$0.4 \text{ m}$ and $1.75 \text{ OR } \$1.75 \text{ m}$ $0.9 / 1.75 \times 100 = 51.43\%$ e.g. 22.83 $0.4 / 1.25 \times 100 = 32\%$	3
	Calculation of average profit OR Calculation of profit and average investment OR Calculation of profit and statement of ARR equation OR Calculation of average investment and statement of ARR equation OR 0.9 and statement of ARR equation	$2.4 / 6 = 0.4 \text{ OR } \0.4 m $\$2.4\text{m AND } \1.75 m $\$2.4\text{m AND } \text{ARR} = \text{Average profit} / \text{average investment} \times 100$ $\$1.75\text{m AND } \text{ARR} = \text{Average profit} / \text{average investment} \times 100$ $0.9 \text{ AND AND } \text{ARR} = \text{Average profit} / \text{average investment} \times 100$	2

Question	Answer			Marks
4(a)	Note	Answer	Mark	
	Calculation of profit OR Calculation of average investment OR ARR equation OR Attempt to calculate mean yearly profit without deducting capital cost	$(0.3 + 0.5 + 0.8 + 1.0 + 1.1 + 1.7) - 3.0 = 2.4 \text{ OR } \2.4 m $(3.0 + 0.5) / 2 = 1.75 \text{ OR } \1.75 m $\text{ARR} = \text{Average profit} / \text{average investment} \times 100$ $5.4 / 6 = 0.9$	1	
	Zero marks	No creditable content	0	

Note: No mark for non-syllabus equation: Average profit/capital cost $\times 100$

Question	Answer					Marks																
4(b) Evaluate whether SF should invest in automating production.	<table border="1" data-bbox="316 271 1888 1373"> <thead> <tr> <th data-bbox="316 271 428 409">Level</th><th data-bbox="428 271 765 409">AO1 Knowledge and understanding 2 marks</th><th data-bbox="765 271 1102 409">AO2 Application 2 marks</th><th data-bbox="1102 271 1439 409">AO3 Analysis 2 marks</th><th data-bbox="1439 271 1888 409">AO4 Evaluation 6 marks</th></tr> </thead> <tbody> <tr> <td data-bbox="316 409 428 779">3</td><td data-bbox="428 409 765 779"></td><td data-bbox="765 409 1102 779"></td><td data-bbox="1102 409 1439 779"></td><td data-bbox="1439 409 1888 779"> 5–6 marks Developed evaluation in context <ul style="list-style-type: none"> • A developed judgement/conclusion is made in the business context. • Developed evaluative comments which balance some key arguments in the business context. </td></tr> <tr> <td data-bbox="316 779 428 1092">2</td><td data-bbox="428 779 765 1092"> 2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question. </td><td data-bbox="765 779 1102 1092"> 2 marks Developed application of relevant point(s) to the business context. </td><td data-bbox="1102 779 1439 1092"> 2 marks Developed analysis that identifies connections between causes, impacts and/or consequences. </td><td data-bbox="1439 779 1888 1092"> 3–4 marks Developed evaluation <ul style="list-style-type: none"> • A developed judgement/conclusion is made. • Developed evaluative comments which balance some key arguments. </td></tr> <tr> <td data-bbox="316 1092 428 1373">1</td><td data-bbox="428 1092 765 1373"> 1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question. </td><td data-bbox="765 1092 1102 1373"> 1 mark Limited application of relevant point(s) to the business context. </td><td data-bbox="1102 1092 1439 1373"> 1 mark Limited analysis that identifies connections between causes, impacts and/or consequences. </td><td data-bbox="1439 1092 1888 1373"> 1–2 marks Limited evaluation <ul style="list-style-type: none"> • A judgement/conclusion is made with limited supporting comment/evidence. • An attempt is made to balance the arguments. </td></tr> </tbody> </table>	Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 2 marks	AO4 Evaluation 6 marks	3				5–6 marks Developed evaluation in context <ul style="list-style-type: none"> • A developed judgement/conclusion is made in the business context. • Developed evaluative comments which balance some key arguments in the business context. 	2	2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	2 marks Developed application of relevant point(s) to the business context.	2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.	3–4 marks Developed evaluation <ul style="list-style-type: none"> • A developed judgement/conclusion is made. • Developed evaluative comments which balance some key arguments. 	1	1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.	1 mark Limited application of relevant point(s) to the business context.	1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.	1–2 marks Limited evaluation <ul style="list-style-type: none"> • A judgement/conclusion is made with limited supporting comment/evidence. • An attempt is made to balance the arguments. 	12
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Question	Answer					Marks
4(b)	0	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	

Indicative content**AO1 Knowledge and understanding**

Limited knowledge **K** will be demonstrated through knowledge of one factor in the decision.

Developed knowledge **K** + **K** will be demonstrated through knowledge of two or more factors in the decision.

- Automation will reduce the relative number of employees.
- Other factors in decision:
 - Cost
 - Availability of finance
 - Impact on employees
 - ARR
 - Payback results and NPV
 - Control over quality
 - Benefits/limitations of alternatives such as outsourcing
 - Production may/should increase
 - Less mistakes made

AO2 Application

Limited application, **APP** applies knowledge to SF once.

Developed application, **APP** + **APP** applies knowledge to SF twice.

Use of results to investment appraisal OFR/case study information.

- ARR is above criterion rate of 20%.
- Payback is 4 years and 4 months (4.36 years). Allow within 5 years. Allow 132.7 days.
- Sales forecast data shows clear upward sales trend of ice cream.
- Capacity utilisation is 90%.
- Plans to export to country D.
- Possible impact of joining free trade area.

Question	Answer	Marks
4(b)	<p>AO3 Analysis</p> <p><i>Limited analysis</i> AN – candidate shows one link in the chain of analysis.</p> <p><i>Developed analysis</i> L2AN – candidate shows two or more links in the chain of analysis.</p> <ul style="list-style-type: none"> Reduction in number of employees will reduce unit labour costs of production AN. This will help reduce unit costs and could result in a higher profit margin L2AN or a lower selling price leading to increased sales L2AN. Outsourcing could reduce control over quality and increase chance of poor-quality food reaching customers and consumers resulting in dissatisfaction AN and therefore a loss of sales L2AN. Joining free trade area in January 2025 may lead to increased exports increasing pressure on capacity AN therefore SF need to increase capacity to meet expected demand L2AN. The capital investment cost required for automating would mean sacrificing alternative investment decisions AN. <p>AO4 Evaluation</p> <p><i>Limited evaluation</i> EVAL – limited supported judgement and/or a weak attempt at evaluative comment.</p> <p><i>Developed evaluation</i> L2EVAL – supported judgement and/or reasonable evaluative comment.</p> <p><i>Developed evaluation in context</i> L3EVAL – supported judgement in context and/or reasonable evaluative comment in context.</p> <ul style="list-style-type: none"> Elements that the evaluation/judgement might depend on: <ul style="list-style-type: none"> Accuracy of the data over 6 years. Significance of retaining control over quality for food products. Depends on whether the increase in demand is long-term. Reaction of employees and consideration of duty to them. Availability of finance. How long will it take to implement? Impact on quality. Availability of appropriately trained/skilled labour. <p>Accept all valid responses.</p>	

Question	Answer					Marks
5	Evaluate the impact on SF of country B becoming a member of the NFTA international trading agreement.					12
Level	AO1 Knowledge and understanding 2 marks	AO2 Application 2 marks	AO3 Analysis 2 marks	AO4 Evaluation 6 marks		
3				<p>5–6 marks Developed evaluation in context</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made in the business context. • Developed evaluative comments which balance some key arguments in the business context. 		
2	<p>2 marks Developed knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p>	<p>2 marks Developed application of relevant point(s) to the business context.</p>	<p>2 marks Developed analysis that identifies connections between causes, impacts and/or consequences.</p>	<p>3–4 marks Developed evaluation</p> <ul style="list-style-type: none"> • A developed judgement/conclusion is made. • Developed evaluative comments which balance some key arguments. 		
1	<p>1 mark Limited knowledge of relevant key term(s) and/or factor(s) is used to answer the question.</p>	<p>1 mark Limited application of relevant point(s) to the business context.</p>	<p>1 mark Limited analysis that identifies connections between causes, impacts and/or consequences.</p>	<p>1–2 marks Limited evaluation</p> <ul style="list-style-type: none"> • A judgement/conclusion is made with limited supporting comment/evidence. • An attempt is made to balance the arguments. 		

Question	Answer					Marks
5	0	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	0 marks No creditable response.	

Indicative content**AO1 Knowledge and understanding**

Limited knowledge  *will be demonstrated through knowledge of international trading agreements* *or* *knowledge of how the international trading agreement could impact SF.*

Developed knowledge  +  *will be demonstrated through knowledge of international trading agreements* *and* *knowledge of how the international trading agreement could impact SF.*

- Free trade area removes tariffs and quotas between member states but allows country B to set tariffs against non-member states.
- Reduce cost of trading between countries.
- Increased competition.
- Reduce import costs.
- Increased potential ability to export products.

AO2 Application

Limited application,  *applies knowledge to SF once.*

Developed application,  +  *applies knowledge to SF twice.*

- Reduce cost of fertiliser imports from country D.
- A member of the NFTA is one of the largest producers of soya in the world.
- High income of NFTA member states.
- Membership will facilitate exports of Sosoy Ice Cream.
- Country B currently has tariffs on agricultural commodities and processed food products.
- SF's manufactured products are likely to be income elastic.

Question	Answer	Marks
5	<p>AO3 Analysis</p> <p><i>Limited analysis</i> AN – candidate shows one link in the chain of analysis.</p> <p><i>Developed analysis</i> L2AN – candidate shows two or more links in the chain of analysis.</p> <ul style="list-style-type: none"> Removal of tariffs will reduce the cost of importing fertiliser and therefore reduce the costs of producing soya and maize AN. Therefore, potential increase in profit margins or can reduce prices to increase sales L2AN. Free trade will increase competition from member states of NFTA which may result in lower sales for SF AN and reduce revenue and profit L2AN. Increase in consumer incomes due to free trade will increase demand for food products that SF sells AN. As member states are high income countries free trade should enable SF to take advantage of likely demand for its food products AN and can increase exports L2AN. <p>AO4 Evaluation</p> <p><i>Limited evaluation</i> EVAL – limited supported judgement and/or a weak attempt at evaluative comment.</p> <p><i>Developed evaluation</i> L2EVAL – supported judgement and/or reasonable evaluative comment.</p> <p><i>Developed evaluation in context</i> L3EVAL – supported judgement in context and/or reasonable evaluative comment in context.</p> <ul style="list-style-type: none"> Elements that the evaluation/judgement might depend on: <ul style="list-style-type: none"> Impact on costs depends on proportion of imported inputs used in the production process. Increased competition in the soya market likely to have significant impact as the product is undifferentiated so SF will have to reduce the price of its soya beans sold to manufacturers of soymeal and soy oil. Export success of SF manufactured foods will depend on brand loyalty that exists in country D and other member states. Supported identification of most important factor or consequence. <p>Accept all valid responses.</p>	