

## **Cambridge Technicals**

### **Business**

Unit 3: Business Decisions

Level 3 Cambridge Technical Certificate/Diploma in Business  
**05834 - 05878**

## **Mark Scheme for January 2018**

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2018

**Annotations**

<b>Annotation</b>	<b>Meaning</b>
Tick	Valid point, mark awarded
Cross	Incorrect
Question mark	Response unclear
BOD	Benefit of doubt (mark awarded)
TV	Too vague (mark not awarded)
REP	Repetition (no additional marks awarded)
NAQ	Not answered question (incorrect focus)
L1	Level 1 response (identification)
L2	Level 2 response (explanation)
L3	Level 3 response (analysis)
L4	Level 4 response (evaluation)
CONT	Context (required for high L4 award only)

**Subject-specific marking instructions**

For Level of Response marked questions marked over 4 levels, the candidate can access at L1 or L2. In either case, they can analyse the point made and proceed directly to L3.

L3 analysis is required before L4 can be accessed.

Question		Answer	Marks	Guidance								
1	a	<p>Indicative content:</p> <table border="1"> <tr> <td>Decision to expand the product range in order to enter a new market</td> <td>Strategic</td> </tr> <tr> <td>Decision to replace warehouse staff with new technology</td> <td>Operational</td> </tr> <tr> <td>Decision to reduce prices to 10% below those of a competitor</td> <td>Tactical</td> </tr> <tr> <td>Decision to replace an existing supplier with one that is cheaper</td> <td>Operational</td> </tr> </table>	Decision to expand the product range in order to enter a new market	Strategic	Decision to replace warehouse staff with new technology	Operational	Decision to reduce prices to 10% below those of a competitor	Tactical	Decision to replace an existing supplier with one that is cheaper	Operational	4	One mark for each correct response.
Decision to expand the product range in order to enter a new market	Strategic											
Decision to replace warehouse staff with new technology	Operational											
Decision to reduce prices to 10% below those of a competitor	Tactical											
Decision to replace an existing supplier with one that is cheaper	Operational											

Question		Answer	Marks	Guidance
1	b	<p>Responses include</p> <p>Opportunity cost:</p> <ul style="list-style-type: none"> <li>the cost of the next best opportunity foregone</li> <li>an alternative given up when making a decision.</li> </ul> <p>Core competencies:</p> <ul style="list-style-type: none"> <li>a combination of multiple resources and skills that distinguish a firm in the marketplace</li> <li>a set of skills or production techniques that help the firm to add value.</li> </ul> <p><b>Opportunity cost</b> Opportunity cost is the cost of the next best alternative foregone when making a decision (1). For example <i>Gateway Revision Ltd</i> can afford to implement either Option 1 or 2 but not both (1).</p> <p>Award 1 mark for the idea that the opportunity to pursue an option is lost when an alternative is chosen.</p> <p><b>Core competencies</b> Core competencies are the combination of skills and resources that enable a business to stand-out from its competitors (1). For example <i>Gateway Revision Ltd</i> needs to decide how best to utilise the skills of their writers together with printers to produce revision guides (1).</p> <p>Award 1 mark for the idea that a core competency helps a firm appear different to its competitors.</p>	4	For each criterion: one mark for understanding of the criterion plus one mark for an example of a relevant decision for <i>Gateway Revision Ltd</i> .

Question	Answer	Marks	Guidance
2 a	<p>Indicative content</p> <p>Gross Profit/Sales Revenue</p> <p><math>673/2795 \times 100 = 24.08</math> (2)</p> <p>Award full marks for the correct answer: 24.08. Allow 24% or 0.24.</p> <p>E.g. 24.0787 (2)</p> <p>E.g. 0.24 (2)</p> <p>E.g. 0.24% (1)</p> <p>E.g. GP/SR (1)</p>	2	<p>Up to two marks.</p> <p>No workings required.</p> <p>Award full (2) marks for 24.08. % not required.</p> <p>Accept all variants with correct rounding eg. 0, 1, 2 dp.</p> <p>Workings should only be marked if the final answer is incorrect. In which case award max one mark for the correct formula, if seen, whether in words or numbers.</p>
2 b	<p>Indicative content:</p> <ul style="list-style-type: none"> <li>• GPR has increased/improved.</li> <li>• NPR has decreased/worsened</li> <li>• Sales revenue has decreased</li> <li>• Business overheads may have increased</li> <li>• Cost of sales may have decreased</li> </ul> <p>Example response: The GPR has improved (1) whilst the NPR has worsened (1). This is possibly because business overheads have risen (1) despite the fall in sales revenue (1).</p>	4	<p>Award one mark for each of four valid points.</p> <p>Do not accept “Gross Profit has increased’ – must refer to ratio for the mark.</p> <p><b>OFR</b> applies to Gross Profit Ratio 2017.</p>

Question		Answer	Marks	Guidance
3	a	<p>Responses include:</p> <ul style="list-style-type: none"> <li>• identify skills gaps of existing workforce</li> <li>• identify skills that new employees will need to possess</li> <li>• identify training and development needs</li> <li>• indicate extent to which present workforce is able to meet the business' requirements</li> <li>• help to produce job description/person specification for new roles.</li> </ul> <p>Example response (<b>contextual response</b>):  <i>Gateway Revision Ltd</i> will be able to identify any gaps in the skills of the existing writers (1), this will help them to identify whether they need new writers (CONT) (+1).</p> <p>Example response (<b>non-contextual response</b>):  <i>Gateway Revision</i> will be able to assess whether the existing workforce have the skills needed to perform their job roles (1) and if not, they can identify the training needed to close the gap.</p>	4	<p>One mark for each correct identification to a maximum of two identification, plus one mark for each of two explanations.</p> <p>In each case, context required for full (two) marks.</p>

Question		Answer	Marks	Guidance
3	b	<p>Responses include:</p> <ul style="list-style-type: none"> <li>• new employee could observe from an experienced colleague</li> <li>• new employee could receive coaching from an experienced colleague</li> <li>• new employee can ask questions of an experienced colleague</li> <li>• new employee can learn whilst performing their new job role.</li> </ul> <p>Example response (<b>contextual response</b>): A new writer can learn whilst performing their new job (1) this will give them immediate feedback on whether they are able to write suitably for school-age readers (CONT) (+1).</p> <p>Example response (<b>non-contextual response</b>): A new employee can learn whilst performing their new job (1) this will give them immediate feedback on whether they are able to do their job adequately.</p>	2	<p>One mark for a correct identification, plus one mark for explanation.</p> <p>Context required for full (two) marks.</p>



Question	Answer	Marks	Guidance
4 a	<p>Indicative content (Lagging moving average):</p> <p>(June + July + August) /3</p> <p><math>(2596+1580+1284)/3 = 1820</math> (2)</p> <p>Award full marks for the correct answer: 1820.</p> <p>E.g. 1820 (2)</p> <p>E.g. (June + July + August) /3 (1)</p> <p>E.g. <math>1284+1580+2596/3 = 3729.33</math> (1)</p> <p>Indicative Content (Centred moving average):</p> <p>(July + August + September) /3</p> <p><math>(1580+1284+2370)/3 = 1744.666667</math> (2)</p> <p>Award full marks for the correct answer without any supporting calculation. Allow any valid rounding.</p> <p>E.g. 1745 (2) 1745.7 (2)</p> <p>(July + August + September) /3 (1)</p> <p>E.g. <math>1580+1284+2370/3 = 3654</math> (1) (incorrect BODMAS)</p>	2	<p>Up to two marks. No workings required.</p> <p>The specification requires learners to use Time Series Analysis to calculate and interpret moving averages. The figures in the table have been calculated using a Simple Lagging Moving Average. Whilst we would expect candidates to recognise this and use this method, any valid Time Series Method used to calculate the value for August should be credited; for example the use of a Centred Moving Average.</p> <p>Award full (2) marks for a correct answer</p> <p>Workings should only be marked if the final answer is incorrect. In which case award max one mark for the correct formula, if seen, whether in words or numbers.</p> <p>Award max 1 mark if all correct <b>except</b> for incorrect application of BODMAS – e.g. <math>2596+1580+1284/3 = 4604</math> (1) (i.e. incorrect application of BODMAS).</p>

Question		Answer	Marks	Guidance
4	b	<p>Responses include:</p> <ul style="list-style-type: none"><li>• there is insufficient data</li><li>• the last three months' figures are needed</li><li>• December 2016 data is not given.</li></ul> <p>Exemplar response: Data for the current month and the previous two months is needed (1) and there is only data for January and February (1).</p> <p>We need the figures for February, January and December (1) and the data for December is missing (1).</p>	2	<p>One mark for a correct identification, plus one mark for explanation.</p> <p>Reward alternative responses e.g. those based on a different moving average method.</p>

Question		Answer	Marks	Guidance
4	c	<p>Responses include:</p> <ul style="list-style-type: none"> <li>• can smooth out monthly data</li> <li>• can enable the underlying trends to be seen more clearly</li> <li>• the impact of a single month's high or low sales can be reduced.</li> </ul> <p>Example response (<b>contextual response</b>): It can smooth out the consequences of book sales (CONT) being concentrated during particular parts of the school year (2)</p> <p>Example response (<b>non-contextual response</b>): It can smooth out the consequences of seasonal figures (1).</p>	2	<p>One mark for a correct identification, plus one mark for explanation.</p> <p>Context required for full (two) marks.</p>

Question	Answer	Marks	Guidance
5	<p><b>Use level of response criteria.</b></p> <p>Responses include:</p> <p>Qualitative information:</p> <ul style="list-style-type: none"> <li>• enables specific customer attitudes to be explored in depth</li> <li>• allows information to be expanded upon e.g. by receiving answers to follow up questions</li> <li>• can enable information to be collected from focus groups</li> <li>• can enable the researcher to explore detailed issues quickly without worrying about sampling issues</li> <li>• can be time-consuming and expensive to collect data</li> <li>• results may not be representative of the population.</li> </ul> <p>Quantitative information</p> <ul style="list-style-type: none"> <li>• can obtain information from large groups of individuals</li> <li>• can be more representative (less biased) than qualitative data</li> <li>• can be easily analysed statistically</li> <li>• harder to obtain information on people's reasons for their actions</li> <li>• questionnaires may not offer potential responses that match the interviewee's own preferences</li> </ul> <p>Example response</p> <p>Quantitative information can be used to obtain large quantities of information (L1) for example by giving a questionnaire to a representative sample of the population (L2). This will enable Sonia to find out the preferences of the South African market which will enable her to offer products that meet their needs (L3). However a problem with quantitative data is that it may not enable Sonia to obtain a detailed understanding of the opinions of the South African consumers (L1).</p>	12	<p><b>NB Contains two embedded marks from Unit 1</b></p> <p><b>LO2: Functional areas of business.</b></p> <p><b>Levels of response:</b></p> <p><b>Level 4 (10 - 12 marks)</b> Candidate evaluates which type of information will be of greatest benefit.</p> <p><b>Level 3 (7 - 9 marks)</b> Candidate analyses advantages or disadvantages of qualitative or quantitative information.</p> <p><b>Level 2 (4 - 6 marks)</b> Candidate explains advantages or disadvantages of qualitative or quantitative information.</p> <p><b>Level 1 (1 - 3 marks)</b> Candidate identifies advantages or disadvantages of qualitative or quantitative information.</p>

Question	Answer	Marks	Guidance
	<p>To remedy this she could conduct a number of focus groups with selected South Africans (L1) and this could enable her to ask detailed questions and if needed, follow up questions to enable her to find out their detailed opinions on existing books and what they would like from Gateway Revision's products (L2). This would make it more likely that Gateway Revision's products would have a competitive advantage resulting in a good level of sales (L3). Overall Sonia will need to use a mixture of both quantitative and qualitative data, however qualitative data is likely to be the most important to Gateway Revision Ltd because the business will be operating in a competitive market with limited knowledge of the specific customer needs of the South African (CONT) customer. The South African market is very different to the UK market and qualitative information with its ability to provide in depth opinions and guidance should help Gateway Revision Ltd tailor its books to the specific needs of this market. Books that are tailored to the specific needs of the market are likely to prove more useful to pupils and teachers and are, therefore, more likely to encourage them to buy Gateway Revision Ltd's books rather than the competitors' (L4).</p>		

Question		Answer	Marks	Guidance
6	a	<p>Responses include:</p> <ul style="list-style-type: none"> <li>• a stock control chart shows information such as: desired maximum, minimum and lead time for stock</li> <li>• the chart can be used to indicate when and how much stock to be ordered</li> <li>• the stock purchase decisions will vary depending on changes to desired stock levels and supplier lead times.</li> </ul> <p>Example response (contextual): A stock control chart for books will show the maximum and minimum stock levels (1). When stocks fall to the reorder level new books will need to be printed (CONT) (+2).</p> <p>Example response (non-contextual): A stock control chart displays information such as maximum and minimum stock levels. (1) When stock levels reach the reorder level the business will order new supplies (+1).</p>	3	One mark for a correct identification, plus one mark for a non-contextual explanation or two marks for a contextual explanation.

Question		Answer	Marks	Guidance
6	b	<p>Responses include:</p> <ul style="list-style-type: none"> <li>• an RFID tag emits a unique signal which is read when it comes into close contact with a reading device</li> <li>• RFID tags can be used to record when stock is moved into and out of a warehouse</li> <li>• RFID tags can help to track the location of stock items.</li> <li>• RFID enables stock movements to be monitored automatically</li> </ul> <p>Example response (<b>contextual response</b>): An RFID tag can be attached to each revision guide (1) to help Gateway Revision track (1) when books arrive from the printer and are then sent to a customer (CONT) (= 3/3).</p> <p>Example response (<b>non-contextual response</b>): An RFID tag can be attached to each item of stock (1) to help Gateway Revision record when a stock item moves into and out of a warehouse (+1) (= 2/3).</p>	3	One mark for a correct identification, plus one mark for a non-contextual explanation or two marks for a contextual explanation.

Question	Answer				Marks	Guidance
7	Use level of response criteria.				16	<p><b>NB Contains two embedded marks from Unit 1 LO6: External influences and constraints and two embedded marks from Unit 1 LO8: Assess business performance.</b></p> <p>NB: This question can be answered from a general business perspective or from the perspective of a specific pathway/function (or a hybrid of both). In all cases the same level of response criteria apply.</p> <p><b>Levels of response</b></p> <p><b>Level 4 (13 - 16 marks)</b> Candidate recommends and justifies which option <i>Gateway Revision Ltd</i> should take.</p> <p><b>Level 3 (9 - 12 marks)</b> Candidate analyses one or more options under consideration at <i>Gateway Revision Ltd</i>.</p> <p><b>Level 2 (5 – 8 marks)</b> Candidate explains issues relating to one or more options under consideration at <i>Gateway Revision Ltd</i>.</p> <p><b>Level 1 (1 – 4 marks)</b> Candidate identifies issues relating to decision making.</p>
		<b>Option 1 Take over the printer</b>	<b>Option 2 Introduce a range of primary school books</b>	<b>Option 3 Expand into overseas markets</b>		
	Capital cost	£50000	£90,000	£300,000		
	Impact on revenue expenditure	Reduced spending on printing costs	Increase due to expanded writing team	Increase due to cost of new operations		
	Payback	4 years	3 years	8 years		
	ARR	5%	15%	20%		
	Finance	Cash reserves	Cash reserves and Fixed rate loan 4.5%, 3 Year (debt funded)	Cash reserves and venture capital (equity funded)		
	Extra revenue?	None if printer stops providing services to other customers	From sales of new books	Sales of books in South African market		
	Ansoff matrix		Product development/Diversification	Diversification Highest risk		



Question			Answer				Marks	Guidance
			Other risk factors	Increase in fixed costs for Gateway Revision resulting in higher break-even level of output.	Uncertain chance of successful entry into new market	Loss of full control due to 20% equity stake of venture capitalist	L4 evaluation – Award 13 marks for suggesting the most beneficial option for <i>Gateway Revision Ltd</i> with justification for the choice. Award 14 marks for suggesting the best option in context with justification. Award 15 marks for a detailed <i>or</i> specific contextual judgement of the most suitable option. Award 16 marks for a detailed <i>and</i> specific contextual judgement of the most suitable option.	
			External influences	None	Changing government finance of education sector, changing importance of testing in primary schools	Trends in South African economy. Exchange rate risk – pound has recently weakened against rand		

Question	Answer	Marks	Guidance
	<p>Example response</p> <p><b>e.g. from a financial data and general business perspective</b></p> <p>Of the three options, Option 1 has the lowest capital cost but also the lowest ARR, Option 3 has the highest capital cost but also the highest ARR (L1). This suggests that Option 1 will be the safest option but also one that will have the smallest impact on the business. This is because Option 1 does not involve a move into new markets but is simply a cost-cutting response to remaining in what could be a declining market (L2).</p> <p>If option 1 is chosen then profits may well rise in the short term due to falling costs but if sales of secondary school books fall then the resulting fall in revenue may cause profits to fall again (L3). Both Options 2 and 3 involve moving diversifying into new markets and so there is the potential for additional sources of revenue (L3).</p> <p>Overall I would judge that Option 2 is the best option. It is more risky than option 1 as it involves diversification (CONT) into a new market but this should result in a permanent source of additional income which will help secure the business' long-term future. It is also less risky than option 3 which also has considerably higher costs as well as some loss of control for Jason and Sonia (L4).</p>		

**OCR (Oxford Cambridge and RSA Examinations)**  
**1 Hills Road**  
**Cambridge**  
**CB1 2EU**

**OCR Customer Contact Centre**

**Education and Learning**

Telephone: 01223 553998

Facsimile: 01223 552627

Email: [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

[www.ocr.org.uk](http://www.ocr.org.uk)

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

**Oxford Cambridge and RSA Examinations**  
is a Company Limited by Guarantee  
Registered in England  
Registered Office; 1 Hills Road, Cambridge, CB1 2EU  
Registered Company Number: 3484466  
OCR is an exempt Charity

**OCR (Oxford Cambridge and RSA Examinations)**  
Head office  
Telephone: 01223 552552  
Facsimile: 01223 552553

© OCR 2018

