



*Rewarding Learning*

**ADVANCED**  
**General Certificate of Education**  
**2014**

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**GCE Applied Business**

Assessment Unit A2 7

*assessing*

Finance

**[A6B11]**

**FRIDAY 13 JUNE, MORNING**

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**MARK**  
**SCHEME**

## **General Marking Instructions**

### **Introduction**

Mark schemes are published to assist teachers and students in their preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

### **The purpose of Mark Schemes**

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of students in schools and colleges.

The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and the mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes, therefore, are regarded as part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all the markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

- 1 Joe is a sole trader who owns a mobile phone shop. He has not prepared financial statements, despite incurring a loss in the last six months of trading.

Explain the importance of preparing the following:

**(a) (i) Income Statement:**

- Facilitates calculation of sales revenues, costs and profits/losses;
- Used by variety of stakeholders, for specific reasons, e.g. bank managers, tax authorities, owner;
- Enables owner to plan ahead in order to reduce financial losses. [2]

**(ii) Statement of Financial Position:**

- Facilitates determination of assets/liabilities of the business;
- Facilitates determination of new worth of business;
- Enables owner to plan ahead to manage the financial position. [2]

- (b)** Joe's accountant advised him that he should prepare an annual budget in order to plan, control and review costs and revenues in the next accounting period. Evaluate three limitations of budgeting to a business such as that operated by Joe.

Limitations:

- Budget may not be accurate; poor quality information (estimates) may lead to inaccuracies and a worse than expected financial position;
- Budgets may be demotivating for staff if targets are too tight/high/difficult to reach; lack of experience of budget preparation.
- Budgets may encourage budgetary 'slack' and lead to dysfunctional behaviour; budgets may be fixed.
- Budgets may be set at too low a level, hence might give the impression of a high performing business;
- Budgets are time consuming to prepare.
- Lack of historical information can make forecasting difficult.
- Considers quantitative data only; ignores external issues.
- Budgeting can be costly to the business.
- Other relevant points accepted.

	<b>AO1 Knowledge and Understanding</b>	<b>AO2 Application</b>	<b>AO3 Analysis</b>	<b>AO4 Evaluation</b>
Level 3	<b>3 marks</b> Candidate demonstrates a competent understanding of the limitations of budgeting for small businesses such as Joe's. Candidate makes good use of specialist vocabulary when it is appropriate.	<b>3 marks</b> Candidate competently applies knowledge.	<b>3 marks</b> Candidate competently analyses the limitations of budgeting for small businesses such as Joe's.	<b>3 marks</b> Candidate competently evaluates the limitations of budgeting for small businesses such as Joe's and comes to a final judgement, if appropriate. Candidate demonstrates good spelling, punctuation and grammar. The meaning of the text is clear. The candidate has consistently used a form and style of writing appropriate to the purpose of the question. Answer is organised in a clear and coherent manner.
Level 2	<b>2 marks</b> Candidate demonstrates a satisfactory understanding of the limitations of budgeting for small businesses such as Joe's. Candidate makes adequate use of specialist vocabulary when it is appropriate.	<b>2 marks</b> Candidate makes a satisfactory attempt to apply knowledge.	<b>2 marks</b> Candidate makes a satisfactory attempt to analyse the limitations of budgeting for small businesses such as Joe's.	<b>2 marks</b> Candidate makes a satisfactory evaluation of the limitations of budgeting for small businesses such as Joe's and comes to a final judgement, if appropriate. Candidate demonstrates satisfactory spelling, punctuation and grammar. The meaning of the text is clear most of the time. The candidate demonstrates a satisfactory level of writing, form and style appropriate to the purpose of the question. Answer is organised in a satisfactory manner.
Level 1	<b>1 mark</b> Candidate demonstrates limited understanding of the limitations of budgeting for small businesses such as Joe's. Candidate makes some use of specialist vocabulary when it is appropriate.	<b>1 mark</b> Candidate makes a limited attempt to apply knowledge.	<b>1 mark</b> Candidate makes a limited attempt to analyse the limitations of budgeting for small businesses such as Joe's.	<b>1 mark</b> Candidate makes a limited attempt to evaluate the limitations of budgeting for small businesses such as Joe's. Candidate makes limited use of spelling, punctuation and grammar. The meaning of the text is not always clear. The candidate demonstrates a limited form and style appropriate to the purpose of the question. The organisation of the answer is limited.
Level 0	<b>0 marks</b> Candidate demonstrates no understanding of the limitations of budgeting for small businesses such as Joe's. Candidate makes no use of specialist vocabulary when it is appropriate.	<b>0 marks</b> Candidate does not attempt to apply knowledge.	<b>0 marks</b> Candidate shows no attempt to analyse the limitations of budgeting for small businesses such as Joe's.	<b>0 marks</b> Candidate makes no attempt to evaluate the limitations of budgeting for small businesses such as Joe's.

AVAILABLE  
MARKS

[12]

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2 (a) Calculate:

- (i) The number of visitors required to attend the circus shows, to achieve breakeven point (using the information in Table 1 only):

Fixed Costs = £280,000

Contribution per visitor = £5 – £2.50 = £2.50

Thus, number of visitors required = (£280,000/£2.50) = 112,000

Marking: [1] FC; [1] Contribution/visitor; [1] BEP.

(3 × [1])

[3]

- (ii) The shortfall in the number of visitors to the circus shows for 2013:

Current visitor numbers:

$180 \times 2 \times 6 = 2160$  visitors/week,

$51 \times 2160$  visitors = 110,160 visitors.

Visitor numbers required to breakeven = 112,000

Shortfall in visitor numbers =  $112,000 - 110,160 = 1,840$

Marking: [1] visitors/week; [1] revised visitor numbers; [1] shortfall.

(3 × [1])

[3]

- (iii) The current profit/(loss) in respect of circus shows for 2013 (using the information contained in Table 1 only):

Net Loss = 1,840 (number of visitors short) × £2.50 (lost contribution)  
= **-£4,600**

or: TR (£550,800) – TC (£555,400) = -£4,600

[1] TR; [1] TC; [1] profit.

Marking: [1] shortfall; [1] contribution; [1] loss.

(3 × [1]); ([1] deducted if not properly annotated)

[3]

- (iv) If the zoo were to open to the public for 52 weeks per year, how many visitors could attend all the circus shows per year:

Number of visitors:

$2,160 \times 52 = 112,320$

Marking: [1] visitor numbers; [1] number of weeks; [1] total.

(3 × [1])

[3]

- (v) With respect to the proposal to open the zoo to the public for 52 weeks per year, re-calculate the total profit/(loss) that could accrue for the financial period under review:

Net Profit = Additional number of visitors =  $320 \times £2.50$  (contribution)  
= **£800**

or: TR (£561,600) – TC (£560,800) = £800

[1] TR; [1] TC; [1] profit.

Marking: [1] extra visitor numbers; [1] Contribution/visitor; [1] Profit.

(3 × [1]); ([1] deducted if not properly annotated)

[3]

(b) On the basis of your calculations, advise the management team at the zoo whether it should open for 52 weeks per year:

- Opening 52 weeks may facilitate cost control, as profit is reported.
- Increasing the number of days the zoo is open would yield better usage of facilities at zoo and circus shows, and possibly encourage more visitors to the zoo;
- This option does not incur an increase in sales price per ticket, so can be affordable to visitors and maintain average numbers at 180 per show;
- This option can be seen as increasing 'access' or the number of visitors to the facilities – 112,320 visitors can be accommodated.
- Assumes that saving in variable costs can be achieved across a greater number of days and thus maintain contribution per ticket;
- Assumes that anticipated number of average visitors can be maintained;

Answer: the proposal to open an extra week can be implemented, as it could yield extra profit of £800 and exceed the breakeven point. [6]

**Note:** Marking: [2] knowledge/understanding; [1] application; [2] analysis; [1] evaluation.  
OFR applies.

(c) Evaluate the usefulness of breakeven analysis to an organisation such as a zoo.

- Enables the zoo to monitor cost behaviour patterns (i.e. fixed/variable costs) and review;
- Enables the zoo to determine breakeven point in terms of number of visitors required to use facilities;
- Encourages the zoo to become more cost conscious to achieve value of money for taxpayers and other stakeholders;
- Enables the zoo to fix ticket prices for visitors;
- Estimates/inaccuracies present;
- Time-consuming activity;
- Ignores external influences (e.g. seasonal factors);
- Other relevant points accepted.

	<b>AO1 Knowledge and Understanding</b>	<b>AO2 Application</b>	<b>AO3 Analysis</b>	<b>AO4 Evaluation</b>
Level 3	<b>3 marks</b> Candidate demonstrates a competent understanding of the ways in which breakeven analysis is of use to the zoo. Candidate makes good use of specialist vocabulary when it is appropriate.	<b>3 marks</b> Candidate competently applies knowledge.	<b>3 marks</b> Candidate competently analyses ways in which breakeven analysis is of use to the zoo.	<b>3 marks</b> Candidate competently evaluates the ways in which breakeven analysis is of use to the zoo and comes to a final judgement, if appropriate. Candidate demonstrates good spelling, punctuation and grammar. The meaning of the text is clear. The candidate has consistently used a form and style of writing appropriate to the purpose of the question. Answer is organised in a clear and coherent manner.
Level 2	<b>2 marks</b> Candidate demonstrates a satisfactory understanding of the ways in which breakeven analysis is of use to the zoo. Candidate makes adequate use of specialist vocabulary when it is appropriate.	<b>2 marks</b> Candidate makes a satisfactory attempt to apply knowledge.	<b>2 marks</b> Candidate makes a satisfactory attempt to analyse ways in which breakeven analysis is of use to the zoo.	<b>2 marks</b> Candidate makes a satisfactory attempt to evaluate the ways in which breakeven analysis is of use to the zoo and comes to a final judgement, if appropriate. Candidate demonstrates satisfactory spelling, punctuation and grammar. The meaning of the text is clear most of the time. The candidate demonstrates a satisfactory level of writing, form and style appropriate to the purpose of the question. Answer is organised in a satisfactory manner.
Level 1	<b>1 mark</b> Candidate demonstrates a limited understanding of the ways in which breakeven analysis is of use to the zoo. Candidate makes some use of specialist vocabulary when it is appropriate.	<b>1 mark</b> Candidate makes a limited attempt to apply some knowledge.	<b>1 mark</b> Candidate makes a limited attempt to analyse ways in which breakeven analysis is of use to the zoo.	<b>1 mark</b> Candidate makes a limited attempt to evaluate the ways in which breakeven analysis is of use to the zoo. Candidate makes limited use of spelling, punctuation and grammar. The meaning of the text is not always clear. The candidate demonstrates a limited form and style appropriate to the purpose of the question. The organisation of the answer is limited.
Level 0	<b>0 marks</b> Candidate demonstrates no understanding of the ways in which breakeven analysis is of use to the zoo. Candidate makes no use of specialist vocabulary when it is appropriate.	<b>0 marks</b> Candidate does not attempt to apply knowledge.	<b>0 marks</b> Candidate shows no attempt to analyse ways in which breakeven analysis is of use to the zoo.	<b>0 marks</b> Candidate makes no attempt to evaluate ways in which breakeven analysis is of use to the zoo.

AVAILABLE  
MARKS

[12]

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3 (a) You are required to calculate the Net Present Value of the project.

**New Equipment**

Year	Annual Cashflows from sales (£)	Discount Factor (5%)	Present Value (£)
2014	<b>800 000</b>	0.952	<b>761 600.00</b>
2015	<b>1 312 500</b>	0.907	<b>1 190 437.50</b>
2016	<b>1 312 500</b>	0.864	<b>1 134 000.00</b>
2017	<b>750 000</b>	0.823	<b>617 250.00</b>
<b>Total Present Value (£)</b>			<b>3 703 287.50</b>
<b>Less Initial Investment (£)</b>			<b>-3 425 000.00</b>
<b>Net Present Value (£)</b>			<b>278 287.50</b>

Note: figures in bold are the answers.

Marking: annual cashflows ([1] each); present values ([1] each);

Initial investment [1]; NPV [1]; (10 × [1])

[10]

Note: OFR to be applied.

(b) You are required to calculate the ‘Payback Period’ of the project.

**New Equipment**

Year	Annual Net Cashflow (£)	Cumulative Net Cashflow (£)
2014	<b>-2 625 000</b>	<b>-2 625 000</b>
2015	<b>1 312 500</b>	<b>-1 312 500</b>
2016	<b>1 312 500</b>	<b>0</b>
2017	<b>750 000</b>	<b>750 000</b>

Payback period is: **3 complete calendar years** (approx.), or 2016.

Note: figures in bold are the answers.

Note: OFR to be applied.

Marking: annual cashflows ([1] each); cumulative cash flows ([1] each);

payback period [1]; (9 × [1])

[9]

(c) Explain with one reason in each case, whether or not the investment in the new equipment should proceed.

(i) NPV: Yes, the project should proceed. The NPV is a positive £278,287.50 indicating that it should be accepted from a financial point of view.

(ii) Payback: Yes the project should proceed. The Payback period is within the 4 year lifespan of the project, indicating that it should be accepted from a financial point of view.

[4]

Marking: [1] Decision } (×2)  
 [1] Reason }  
 OFR applies.



(d) In relation to the proposed investment in the new equipment evaluate the use of the Payback method of investment appraisal, to the bakery.

AVAILABLE  
MARKS

Advantages:

- Concept of the Payback method should be easily understood by the bakery;
- Payback method identifies the earliest time-point at which the initial investment in the new equipment will be recovered in terms of cashflows;
- Payback method should be straightforward to calculate for the bakery;
- Payback indicates the timing of cashflows, which might be important to the bakery which places priority upon early receipt of larger cashflows throughout the lifespan of the equipment;

Disadvantages:

- payback does not take into consideration the cashflows once the payback position has been reached, hence may reject highly lucrative projects with larger cashflows at the end of the new equipment lifespan;
- makes a number of simplistic assumptions which may be unrealistic;
- does not take into account the time value of money;
- Ignores qualitative factors.

OFR applies.

	<b>AO1 Knowledge and understanding</b>	<b>AO2 Application</b>	<b>AO3 Analysis</b>	<b>AO4 Evaluation</b>
Level 2	<b>2 marks</b> Candidate demonstrates a satisfactory understanding of key issues related to the adoption of the Payback Method by the bakery. Candidate makes adequate use of specialist vocabulary when it is appropriate.	<b>2 marks</b> Candidate makes a satisfactory attempt to apply knowledge.	<b>2 marks</b> Candidate makes a satisfactory attempt to analyse key issues related to the adoption of the Payback Method by the bakery.	<b>2 marks</b> Candidate makes a satisfactory attempt to evaluate the key issues related to the adoption of the Payback Method by the bakery and comes to a final judgement. Candidate demonstrates satisfactory spelling, punctuation and grammar. The meaning of the text is clear most of the time. The candidate demonstrates a satisfactory level of writing, form and style appropriate to the purpose of the question. Answer is organised in a satisfactory manner.
Level 1	<b>1 mark</b> Candidate demonstrates limited understanding of the issues related to the adoption of the Payback Method by the bakery. Candidate makes some use of specialist vocabulary when it is appropriate.	<b>1 mark</b> Candidate makes a limited attempt to apply some knowledge.	<b>1 mark</b> Candidate makes a limited attempt to analyse issues related to the adoption of the Payback Method by the bakery.	<b>1 mark</b> Candidate makes a limited attempt to evaluate the issues related to the adoption of the Payback Method by the bakery. Candidate makes limited use of spelling, punctuation and grammar. The meaning of the text is not always clear. The candidate demonstrates a limited form and style appropriate to the purpose of the question. The organisation of the answer is limited.
Level 0	<b>0 marks</b> Candidate demonstrates no understanding of any of the issues related to the adoption of the Payback Method by the bakery. Candidate makes no use of specialist vocabulary when it is appropriate.	<b>0 marks</b> Candidate makes no attempt to apply knowledge.	<b>0 marks</b> Candidate makes no attempt to analyse any issues related to the adoption of the Payback Method by the bakery.	<b>0 marks</b> Candidate makes no attempt to evaluate any of the issues related to the adoption of the Payback Method by the bakery.

	<b>AVAILABLE MARKS</b>
[8]	31
<b>Total</b>	<b>80</b>