Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2019

Professional Business Services

Assessment Unit AS 3

assessing

Financial Decision Making

[SPB31]

TUESDAY 28 MAY, AFTERNOON

MARK SCHEME

General Marking Instructions

Introduction

The main purpose of the mark scheme is to ensure that examinations are marked accurately, consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidates' responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses.

Assessment objectives

Below are the assessment objectives for **GCE Professional Business Services.**

Candidates should be able to:

AO1 Demonstrate knowledge and understanding of terms, concepts, theories, methods and models used by professional business services firms and their client businesses.

AO2 Apply knowledge and understanding of concepts, theories, methods and models used by professional business services firms and their client businesses.

AO3 Investigate, analyse and evaluate concepts, theories, methods and models as used by professional business services firms and their client businesses.

Quality of candidates' responses

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 17- or 18-year-old which is the age at which the majority of candidates sit their GCE examinations.

Flexibility in marking

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 17- or 18-year-old GCE candidate.

Awarding zero marks

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

Marking calculations

In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error. To avoid a candidate being penalised, marks can be awarded where correct conclusions or inferences are made from their incorrect calculations.

Types of mark schemes

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

Levels of response
In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement.

The following guidance is provided to assist examiners.

- ***Threshold performance:*** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- ***Intermediate performance:*** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- ***High performance:*** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Quality of written communication
Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within either three or four levels of response.

Where there are three levels of response, quality of written communication is distinguished as follows:

Level 1: Quality of written communication is basic.
Level 2: Quality of written communication is good.
Level 3: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

Level 1 (Basic): The candidate makes only a limited selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 (Good): The candidate makes a reasonable selection and use of an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning clear.

Level 3 (Excellent): The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

Where there are four levels of response, quality of written communication is distinguished as follows:

Level 1: Quality of written communication is basic.
Level 2: Quality of written communication is satisfactory.
Level 3: Quality of written communication is good.
Level 4: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below.

Level 1 (Basic): The candidate makes only a basic selection and use of an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 (Satisfactory): The candidate makes a satisfactory selection and use of an appropriate form and style of writing. Relevant material is organised with some degree of clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a satisfactory standard to make meaning evident.

Level 3 (Good): The candidate makes a good selection and use of an appropriate form and style of writing. Relevant material is organised with good clarity and coherence. There is good use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a good standard to make meaning clear.

Level 4 (Excellent): The candidate successfully selects and used the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is widespread and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard to make meaning absolutely clear.

1 (a) AO1

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Responses may include:
- Financial decision making involves a business making the necessary decisions based on their financial information or data available with a view to achieving the best financial outcome for the business, e.g. investment decisions.

All valid responses will be given credit

[1] basic explanation of financial decision making
[2] good explanation of financial decision making [2]

(b) AO1, AO2

Responses may include:
- To enable Joyce and John to account for all the resources under their control within their farm making sure that they are being used in the best possible way to justify the cost associated with their new investment, i.e. recent diversification.
- To enable Joyce and John to plan ahead in order to achieve their business objectives, such as survival or growth, allowing them to move their farm forward in the correct direction and ensuring success in developing their customer base for the elderflower cordial.
- To enable Joyce and John to meet the needs of all their stakeholders, for example, to ensure employees are paid and government receives tax.
- To enable Joyce and John to meet the costs of their legal obligations, for example health and safety legislation, minimum wage regulations and industry-specific legislation (food standard laws).
- To enable Joyce and John to support the achievement of non-financial objectives, such as corporate social responsibility.

All valid responses will be given credit

[1] identification of reason for the importance of effective financial decision making
[2] identification and explanation of reason for Joyce and John to consider the importance of effective financial decision making
(3 × [2]) [6]

(c) AO1, AO2, AO3

Responses may include:
Advantages of using own capital may include:
- Cheaper source of finance – as Joyce and John will not be required to pay interest on the amount borrowed.
- Increased control – self-financing their business gives Joyce and John much more control than other finance options. It also means that they do not need to pay back or rely on outside investors or lenders, who could decide to withdraw their support at any time.
- Retain ownership – Joyce and John will retain full ownership of their business, which in turn means that they will receive 100% of future profits.
- Control expenditure – as Joyce and John fund their business, they will be forced to live within their means, only investing in business equipment and marketing when they need to. This can help them to prioritise their business expenditure and avoid excessive spending.

- Easy access – to their own capital will provide Joyce and John with instant funding and allow them to withdraw money whenever they want for their new business venture (refurbishing of the farm building) up to the limit of £20,000. If they were to run into an unexpected bill, they could use the cash they had set aside to pay it promptly and avoid late payment fees.
- Secured investment – by investing their own capital into their business, Joyce and John are sure that their own capital is safe and secure as they are investing it in their farm – the development of their own business. It also means that they are doing something worthwhile with their money and therefore safe as long as their business continues to be successful.
- Avoiding late penalty fees – As Joyce and John are using their own capital to invest in the setting up of their business they will not have to worry about missing due dates and incurring late payment fees, and they will have the assurance that they are paying their bills which relate to the refurbishment of the farm building with money that they already have (instead of money they would have to borrow from another source).
- Growth of investment – By using their own capital to aid the setting up of the business, Joyce and John should see a sizeable return on their investment compared to that received from a bank, therefore allowing their investment to grow.

Disadvantages of using own capital may include:
- Limited availability – by using their own capital to finance their business, Joyce and John may put a strain on their family and personal life. They may not have enough money left over to cover their living costs. Joyce and John should try to leave a contingency fund in case they would need extra money to see them through a difficult period.
- Unlimited liability – If Joyce and John's business was to get into debt and fail, they could lose their home and other personal possessions. Joyce and John need to be aware and cautious of how they carry out the purchasing. This will avoid inappropriate or unnecessary spending which could result in their business getting into financial difficulty with the possibility of losing their invested monies (own capital).
- Limiting opportunities for support – If they fund their business alone, they will have to develop their own contacts and mentoring opportunities. Alternative sources of finance such as investors and venture capitalists could provide mentoring and networking opportunities for Joyce and John.
- Inappropriate spending – as Joyce and John can withdraw from their account at any given time. This can be detrimental for Joyce and John and their farm, especially if they are spending their money not on necessities or emergencies but on non-essential items for the farm or personal use.

All valid responses will be given credit [16]

[0] is awarded for a response not worthy of credit

Level 1 ([1]–[4])
- Basic knowledge and understanding of an advantage or a disadvantage of using their own capital as a source of finance.
- Application is basic with limited or no relevant reference to Joyce and John's new business venture.
- Basic discussion of the advantages and disadvantages for Joyce and John using their own capital.

AVAILABLE MARKS

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- Judgement is limited and may or may not be supported by candidate's discussion.
- The quality of the candidate's written communication is basic.

Level 2 ([5]–[8])
- Satisfactory knowledge and understanding of up to two advantages or two disadvantages of Joyce and John using their own capital as a source of finance.
- Application is satisfactory with some reference to Joyce andJohn's new business venture.
- Satisfactory discussion of the advantages and disadvantages of Joyce and John using their own capital.
- Judgement is partially reasoned and supported by candidate's discussion.
- The quality of the candidate's written communication is satisfactory.

Level 3 ([9]–[12])
- Good knowledge and understanding of two advantages and two disadvantages of Joyce and John using their own capital as a source of finance.
- Application is good with clear reference to Joyce and John's new business venture.
- Good discussion of the advantages and disadvantages of Joyce and John using their own capital.
- Judgement is reasoned and supported by candidate's discussion.
- The quality of the candidate's written communication is good.

Level 4 ([13]–[16])
- Excellent knowledge and understanding of two advantages and two disadvantages of Joyce and John using their own capital as a source of finance.
- Application is excellent with accurate and coherent reference to Joyce and John's new business venture.
- Excellent discussion of the advantages and disadvantages for Joyce and John using their own capital to finance their business venture.
- Judgement is fully justified and informed by candidate's discussion.
- The quality of the candidate's written communication is excellent. 24

2 (a) AO1

Responses include:
- profitability or performance
- liquidity
- gearing
- financial efficiency
- shareholder earnings

(5 × [1]) [5]

(b) AO2

Answers are:

(i) Net Profit Margin %

$$\frac{5000}{40000} \times 100 = 12.5\%$$

[1] for using correct figures
[1] for correct answer, stated as a percentage [2]

AVAILABLE MARKS

(ii) Return on Capital Employed %

$$\frac{5000}{36\,500 - 7000} \times 100 = 16.94\% \text{ or } 17\%$$

or

$$\frac{5000}{29\,500} \times 100 = 16.94\% \text{ or } 17\%$$

[1] for using correct figures
[1] for correct answer, stated as a percentage [2]

(iii) Current Ratio

$$\frac{14\,000}{7000} = 2:1$$

[1] for using correct figures
[1] for correct answer, stated as a ratio [2]

(c) AO3

Responses may include:

(i) Net Profit Margin

This ratio calculates the amount of profit made per every £1.00 of sales revenue. At the moment the projected net profit is 12.5%. Therefore, the new business will be making a profit of £0.125 for every £1.00 of sales revenue which is fairly good for Joyce and John as they are embarking upon the production of elderflower cordial. Joyce and John would like to see this figure remain consistent, if not increase in the future from year to year to give them both confidence in their farm diversification.

All valid responses will be given credit

[1] basic analysis of the net profit ratio for Joyce and John's farm
[2] good analysis of the net profit ratio for Joyce and John’s farm [2]

(ii) Return on Capital Employed

This ratio calculates the profit made as a percentage of the total amount of money used to generate it. It shows that the farm would make a fair return on the capital invested of 17%. This indicates strong performance compared to other forms of investment such as bank interest rates. This ratio is important to attract any new investors as they would be keen to see a high rate of return for their investment. In this case, Joyce and John who have invested their own capital will want the percentage to grow from year to year as a sign of success for their farm and their investment.

All valid responses will be given credit

[1] basic analysis of the return on capital employed ratio for Joyce and John's farm
[2] good analysis of the return on capital employed ratio for Joyce and John’s farm [2]

(iii) Current Ratio

This ratio calculates whether a business has sufficient working capital. Joyce and John should have a current ratio of between 1.5 and 2 to avoid cash flow problems. In the case of Joyce and John’s farm the current ratio is 2 : 1 which shows that they are able to pay their current liabilities if they were to be collected immediately by the lender and still have sufficient funds remaining.

All valid responses will be given credit

[1] basic analysis of the current ratio for Joyce and John's farm
[2] good analysis of the current ratio for Joyce and John's farm [2]

(d) AO1, AO2, AO3

Responses may include:
Analysis of the benefits of cash flow forecasting may include:

- Planning and control – cash flow forecasts facilitate improved planning and control of business activities for Joyce and John within the farm. This can help Joyce and John with their business – having accurate forecasts to hand, they both can see what the impact on their cash flow will be before they commit any money to a decision.
- Identify surplus/deficit – cash flow forecasts allow Joyce and John to anticipate surplus and deficits in the cash cycle and take corrective measures, therefore being proactive with their financial matters.
- Improved co-ordination – cash flow forecasts consider the timing of payments and receipts which will assist Joyce and John with the co-ordination of their farm finances.
- Easy to see their options – cash flow forecasting means that Joyce and John can visualise any and all of the scenarios they can think of for their business in any year. Cash flow forecasting can give Joyce and John the information they need to help them make those big decisions, including: taking on more staff, changing their prices, tendering for a big contract, moving premises or changing suppliers. Cash flow forecasting is a vital part of Joyce and John's decision making process.
- Better decision making – cash flow forecasting, on a regular basis, will provide Joyce and John with a better knowledge that will enable them to make more informed decisions for the success of their new business.
- Growth planning – cash flow forecasting can help Joyce and John understand the different options and choose the one that fits their business. Cash flow forecasting can be done at any stage of a process, so if Joyce and John have committed to a growth strategy but something changes and they are not sure if they should continue pursuing it or not, they can stop and reforecast their new options.
- Can highlight potential risks – cash flow forecasting will highlight any unforeseen problems for Joyce and John with their cash flow giving them the time and information they need to steer their business clear of any problems before they occur. This is particularly critical for small businesses, such as Joyce and John's farm as they may not have cash reserves to fall back on if something goes wrong. Understanding the consequences of just some of the main risks which may occur can significantly reduce the impact they will have on their business.

Analysis of the limitations of cash flow forecasting may include:

- Lack of accuracy – cash flow forecasts are estimates and may not be entirely accurate which may mislead Joyce and John with the cash flow within their business.
- External influences – cash flow forecasts are subject to changes in the external environment in which the business operates, such as changes in economic conditions, interest rates and technology.
- Limited information – Joyce and John will have to make use of the limited information available to make decisions in their forecasting. Due

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to their new business venture starting up Joyce and John may not have a lot of information to base their cash flow forecast on and therefore it may be difficult to create and follow.

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All valid responses will be given credit [12]

[0] is awarded for a response not worthy of credit

Level 1 ([1]–[4]) Basic
- Basic knowledge and understanding of up to two benefits and one limitation of cash flow forecasting for Joyce and John's farm.
- Application is basic with limited reference to Joyce and John's farm.
- Analysis of up to two benefits and one limitation of cash flow forecasting for Joyce and John's farm is basic.
- The quality of the candidate's written communication is basic.

Level 2 ([5]–[8]) Good
- Good knowledge and understanding of at least one benefit and one limitation of cash flow forecasting for Joyce and John's farm.
- Application is good with some reference to Joyce and John's farm.
- Analysis of at least one benefit and one limitation of cash flow forecasting for Joyce and John's farm is good.
- The quality of the candidate's written communication is good.

Level 3 ([9]–[12]) Excellent
- Excellent knowledge and understanding of two benefits and one limitation of cash flow forecasting for Joyce and John's farm.
- Application is excellent with clear reference to Joyce and John's farm.
- Analysis of two benefits and one limitation of cash flow forecasting for Joyce and John's farm is excellent.
- The quality of the candidate's written communication is excellent. 29

3 (a) AO1

Responses may include:
Payback method:
The payback method is defined as the time, usually expressed in years, it takes for the cash income from a capital investment project to equal the initial cost of the investment. The choice between two or more projects is to accept the one with the shortest payback time. A shorter payback period equates to a faster return on the capital investment and therefore reduced risk.

Net present value method:
This method of investment appraisal takes into consideration the timing of returns made during the expected life of the equipment as well as the size of the return from an investment. NPV takes account of the value of money in real terms. Each year the projected cash inflow will be calculated using a specific discount factor which would provide Joyce and John with a true value of the projected sum. This method of investment appraisal forms the basis of the concept known as the time concept of money which means that money received by Joyce and John in the future is worth less than it is today.

All valid responses will be given credit

[1] basic explanation of a method of investment appraisal
[2] good explanation of a method of investment appraisal
[3] excellent explanation of a method of investment appraisal
(2 × [3]) [6]

(b) (i) AO2

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Equipment 1			Equipment 2		
Initial investment £25,000			Initial investment £30,000		
Estimated net cash inflow:			Estimated net cash inflow:		
Year 1	£8,500		Year 1	£10,000	
Year 2	£11,500		Year 2	£10,000	
Year 3	£15,000		Year 3	£20,000	
		Net Cash Flow			Net Cash Flow
Initial Investment	(25,000)	(25,000)	Initial Investment	(30,000)	(30,000)
Year 1 cash Inflow	8,500	(16,500) [1]	Year 1 cash Inflow	10,000	(20,000) [1]
Year 2 cash Inflow	11,500	(5,000) [1]	Year 2 cash Inflow	10,000	(10,000) [1]
Year 3 cash Inflow	15,000	10,000 [1]	Year 3 cash Inflow	20,000	10,000 [1]
Payback period = 2 years 4 months [1]			**Payback period** = 2 years 6 months [1]		

(8 × [1]) [8]

(ii) AO3

Answer is:
Equipment 1 as it has the shortest payback period [1]

(c) AO1, AO2, AO3

Responses may include:
Advantages of the payback method of investment appraisal may include:

- Simple to use and understand – payback is a simple method to use for Joyce and John to use as it is straight forward and easy to understand and calculate. When engaged in the analysis of a proposed project, the payback period can probably be calculated without the use of any assistance and the number of years is an easily understood concept.
- Risk focus – the analysis is focused on how quickly money can be returned from an investment, which is essentially a measure of risk. Identifying projects that provide the fastest return on investment is particularly important for businesses such as Joyce and John's with limited cash as it needs to recover its money as quickly as possible. It would allow Joyce and John to pay back their investment for the new piece of equipment more quickly than any other method.
- Greater accuracy – this method would allow Joyce and John to place more emphasis on early return forecasts which are more likely to be accurate for them than longer term forecasts.
- Changing circumstances – this method is useful for situations where technology changes rapidly, such as production equipment for Joyce and John's new elderflower cordial. It is important for Joyce and John to recover the cost of their investment as soon as possible.

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- Useful screening tool – using the payback method for Joyce and John may be the first step in assessing competitive projects as a screening tool before they decide to pursue their actual investment by using another method of investment appraisal.
- Forward planning – in the future, if Joyce and John found themselves facing liquidity problems, this method would provide them with a good ranking of projects that would return money early and assist with their situation.
- Improved decision making – it is beneficial for Joyce and John's farm as it is used to inform them of the time frame in which they would recover from their original investment, therefore allowing Joyce and John to accept or decline the risk involved for a quick return on their chosen investment in order to select those projects which have a low payback period and ignore those projects which require long periods/projects.

Disadvantages of payback method of investment appraisal may include:
- Cash inflows after payback ignored – cash earned after the payback period by Joyce and John is ignored and not taken into consideration on the investment or future value of the worth of the equipment.
- Profitability not considered – this method ignores the profitability of the project or equipment option chosen by Joyce and John for their farm as the emphasis is placed on how quickly it will take them to repay the cost of the equipment.
- Time value of money – the payback period method does not take into account the time value of money, therefore, providing a false value of the money within the farm for Joyce and John to make decisions regarding its future.
- Irregular inflows – the cash inflows from a project may be irregular, with most of the return not occurring in regular monthly intervals.
- Leads to short term thinking – the payback method does not consider cash inflows from a project that may occur after the initial investment has been recovered. Most major capital expenditures have a long life span and continue to provide income long after the payback period. Since the payback method focuses on short-term return, an attractive project could be overlooked by Joyce and John if the payback period is the only consideration.

All valid responses will be given credit [12]

[0] is awarded for a response not worthy of credit

Level 1 ([1]–[4]) Basic
- Basic knowledge of the advantages and disadvantages of using the payback method of investment appraisal for any new equipment that Joyce and John plan to purchase for their farm.
- Application is basic with limited reference to Joyce and John's farm.
- Analysis of advantages and disadvantages of using the payback method of investment appraisal for the farm is basic.
- Evaluation of the advantages and disadvantages of the payback method of investment appraisal for the farm is basic.
- Judgement of the suitability of payback is limited.
- The quality of the candidate's written communication is basic.

Level 2 ([5]–[8]) Good
- Good knowledge of the advantages and disadvantages of using the payback method of investment appraisal for any new equipment that Joyce and John would require to purchase for their farm.
- Application is good with some reference to Joyce and John's farm.

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• Analysis of advantages and disadvantages of using the payback method of investment appraisal for the farm is good. • Evaluation of the advantages and disadvantages of the payback method of investment appraisal for the farm is good. • Judgement of the suitability of payback is good. • The quality of the candidate’s written communication is good. **Level 3 ([9]–[12]) Excellent** • Excellent knowledge of the advantages and disadvantages of using the payback method of investment appraisal for any new equipment that Joyce and John would require to purchase for their farm. • Application is excellent with clear reference to Joyce and John's farm. • Analysis of advantages and disadvantages of using the payback method of investment appraisal for the farm is excellent. • Evaluation of the advantages and disadvantages of the payback method of investment appraisal for the farm is excellent. • Judgement of the suitability of payback is excellent. • The quality of the candidate’s written communication is excellent.	27
Total	**80**