

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge International Diploma Advanced Level

MARK SCHEME for the October 2011 question paper
for the guidance of teachers

CAMBRIDGE INTERNATIONAL DIPLOMA IN BUSINESS

5173 Business Finance, maximum mark 100

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 must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

- 1 (a) Suggest and explain one reason why the net profit figures were better than expected, even though the gross profit figure were below estimate. [3]

Allow 1 mark for an answer that indicates that net profit = gross profit minus expenses.
Allow 2 further marks if the answer explains that expenses must be lower than expected e.g. there will have been some cost savings.

- (b) Explain why the sales from the franchises account for 40% of the turnover but only 25% of the profits. [3]

Allow 1 mark for an answer that explains that the products will be sold at prices set by the franchisor and a further 2 marks for explaining that the profits from sales will be shared by both parties in the franchise.

- (c) (i) Explain what is meant by working capital. [2]

Allow 1 mark for a vague answer e.g. money required for day-to-expenses.
Allow 2 marks if the answer provides the formula:
Working capital = Current assets minus Current liabilities.

- (ii) Explain why it is necessary to monitor the level of working capital. [3]

Allow up to 3 marks for any well explained reason e.g. if working capital is too low, there may not be sufficient funds to pay the creditors and the suppliers may decide not to sell products to the firm. This will disrupt the production process and lead to falling sales revenue and even closure of the business.

- (d) (i) Explain what is meant by an incorporated organisation. [3]

Allow 1 mark for a vague statement that mentions a private or public company.
Allow the full 3 marks if the answer refers to an organisation that has gone through the process of incorporation associated with the Companies Acts. The company that is formed is a separate legal entity.

- (ii) Explain one financial advantage and one financial disadvantage that would result from the process of incorporation. [4]

Allow 2 marks for any relevant advantage/ disadvantage that is well explained.
Advantages – access to greater capital, enhanced credit status, limited liability etc.
Disadvantages – need to share profits with others, loss of privacy may lead to lower profits etc.

- (e) Explain one advantage of operating as a franchisee. [2]

Allow 2 marks for any relevant advantage that is well explained.
Advantages – selling a well established product, support from franchisor, franchisor is responsible for promotion and advertising etc.

[Total: 20]

Page 3	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

2 (a) Distinguish clearly between a trial balance and a balance sheet. [6]

Level 1 (1–3 marks)

Candidate defines both terms in a vague manner or only one term clearly.

Level 2 (4–6 marks)

Candidate produces clearer definition of both terms and effective comparison

A trial balance is a list of ledger balances shown in debit and credit columns. It is not a legal requirement to produce a trial balance but it is a useful way of checking that all the transactions have been correctly posted to the appropriate ledger accounts.

At the end of the chosen accounting period the ledger accounts are closed off by totalling all the credit and debit balances. If the total of debits exceeds the total of credits then there is said to be a debit balance on the account; if the credits exceed the debits then the account has a credit balance. All of the account balances are then brought together and if the entries have been made properly there should be an overall balance.

The balance sheet is a final year-end statement that lists all of the assets and liabilities of the business. It is a legal requirement for incorporated organisations and can be made available to the public. It provides evidence of change in worth of the business. It will be produced according to the recognised accounting conventions.

(b) Outline and explain the basic balance sheet equation. [2]

For simple statement that balance sheet always balances – 1 mark

For inclusion of balance sheet equation and explanation – 1 additional mark

Possible equations include:

Assets = Capital + Liabilities

Assets – Liabilities = owners/shareholders' Equity

Assets = Capital introduced in previous periods + Liabilities

- + Profit retained in previous periods
- + Profit earned in the current period
- + Capital introduced in the current period
- Drawings in the current period

Page 4	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

- (c) **An audited set of accounts will represent a true and fair view of the financial affairs of a business.**

Identify and explain three possible adjustments that may be necessary to ensure that the accounts are accurate. **[3 × 4]**

Level 1 (1–2 marks)

Candidate explains a relevant adjustment in a vague manner

Level 2 (3–4 marks)

Candidate produces a clearer explanation of the adjustment

Examples of adjustments include:

Depreciation is an estimate of the amount of value that an asset has lost during the course of the accounting period. This cost will be set against the profits of the business and it will appear as an expense in the profit and loss account. At the same time it is a reflection of the reduced value of the asset and it is therefore necessary to reduce the value of the asset in the balance sheet by the depreciation charge. Over time the depreciation charges will mount up and they are often referred to as a provision or accumulated depreciation. If this is subtracted from the initial cost of the asset we will derive the net book value of the asset.

A bad debt is an individual debt that is not expected to be repaid. This could be for a number of reasons: the debtor may have become bankrupt, the debtor has gone out of business or the debtor may have dishonestly undertaken the transaction. If it is believed that the debt is bad it needs to be written off by an entry in the bad debts account

When the figure for closing stock is calculated it is important to ensure that the stock valuation method that is being employed is consistent with the method that was employed in previous accounting periods. There are three main methods that can be employed to value stocks: the FIFO (first in first out) method, the LIFO (last in first out) method and the AVCO (weighted average cost) method. Each of these methods will yield a different closing stock figure and this will therefore affect the cost of sales figure and ultimately the declared profit figure.

Other adjustments include doubtful debtors, stock that has deteriorated and is unusable.

[Total: 20]

Page 5	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

3 Firms often use investment appraisal techniques to assess the viability of possible investment opportunities.

- (a) Explain how the payback method can be used to assess the viability of a proposed investment. [4]**

Level 1 (1–2 marks)

Candidate explains the method in a vague manner.

Level 2 (3–4 marks)

Candidate produces a clearer explanation of the method.

This is the simplest method of investment appraisal which attempts to measure the time that will be required for the investment to repay the initial cash outlay. It is calculated by measuring the net cash inflow of the investment and comparing this with the net cash outflows, including the initial investment cost. The decision rule will be that investments that have the shortest payback periods will be preferred to those that have longer payback periods.

- (b) Explain how the accounting rate of return (ARR) % method can be used to assess the viability of a proposed investment. [4]**

Level 1 (1–2 marks)

Candidate explains the method in a vague manner.

Level 2 (3–4 marks)

Candidate produces a clearer explanation of the method.

The average rate of return technique measures the average expected returns of the investment and expresses them as a percentage of the initial capital cost of the investment.

A simple formula for the ARR is $ARR\% = \frac{\text{Net return per annum} \times 100}{\text{Initial capital outlay}}$

If this rate of return was higher than the cost of obtaining the initial funds and the rate was above that of any alternative uses of the funds then the company should consider the investment.

In more sophisticated versions of the ARR technique allowances are made for the depreciation of the investments and the residual value of the investments. The formula for calculating the ARR% is therefore amended as follows:

$ARR\% = \frac{\text{Average net returns (Profits) – annual depreciation allowances} \times 100}{\text{Initial capital cost – residual value}}$

It is believed that this gives a more accurate picture of the actual returns that will be forthcoming from any investment.

Page 6	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

- (c) Using the information in Item A, calculate the payback period for both of the machines. [8]

Allow up to 4 marks for each of the calculations.

Level 1 (1–2 marks)

Candidate demonstrates some understanding of the process required but the answer contains errors and/or is incomplete

Level 2 (3–4 marks)

Candidate clearly understands how to use the appraisal method and at the top end produces a complete and accurate calculation.

For suggested solution see Appendix 1

- (d) (i) More modern investment appraisal methods involve discounting future cash flows. Explain why this is necessary. [2]

- (ii) Explain what is meant by Net Present Value (NPV) [2]

Allow up to 2 marks for a good explanation of discounted cash flow techniques.

Allow up to 2 marks for a good explanation of Net Present Value.

Discounted cash flow is a method of investment appraisal that takes account of the time value of money. It does this by considering two factors; the length of time and the prevailing interest rates. It therefore addresses the issue of dealing with income that will be received at some time in the future and comparing this with income that is received at the present time.

Net Present Value attempts to find the total value of a future stream of income in today's prices. There are five basic steps associated with this method.

1. Determine the effective life of the investment
2. Identify the relevant cash flows in and out of the organisation e.g. the initial capital cost. Any future receipts should be discounted if there is inflation within the economy
3. Determine the correct discount rate to be applied to the investment. Very often this will be based on the prevailing interest rates.
4. Using the appropriate discount rate, calculate the present value of each amount of income to be received over the life of the project. The total present value of returns can then be set against the initial cost. This gives the net present value and if this figure is positive the investment should be considered, if it is negative the investment should be rejected.
5. Compare the results of competing projects and proceed with the project that has the highest NPV.

[Total: 20]

Page 7	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

- 4 (a) Explain how each of the external (PEST) factors outlined in the case study could affect the future profitability of the firm. [20]

Allow 1 mark for each factor identified.

Allow up to 4 additional marks for a reasoned explanation of how each factor could influence the future level of profits.

To achieve a full award the response must link the factor to changes in costs and/or revenues and then by implication the level of profit e.g. downturn in the economy – less consumer spending – lower turnover for the business – costs remaining fairly constant – lower levels of profits.

[Total: 20]

- 5 (a) Using the information in Item A and employing the straight-line method of depreciation:

- (i) Calculate the annual depreciation allowances for machine A and for machine B. [2 × 4 = 8]

Allow up to 4 marks for completing each calculation

Level 1 (1–2 marks)

Candidate has limited knowledge of process and makes a limited attempt to produce calculations.

Level 2 (3–4 marks)

Candidate has clear knowledge of process and at top end produces accurate results.

For suggested solution see Appendix 2

- (ii) Calculate the book value of both of the machines at the end of Year 3. [6]

Allow 1 mark for demonstrating knowledge of how to undertake the calculation and a further 2 marks if the calculation is correct.

If answer provides correct solution with no explanation allow 3 marks.

For suggested solution see Appendix 2

Page 8	Mark Scheme: Teachers' version	Syllabus
	Cambridge International Diploma – October 2011	5173

- (b) Identify and explain one alternative method of depreciation that could be employed by the firm, and explain the circumstances when this method would be more suitable than the straight-line method. [6]

It is most likely that the candidates will identify the reducing balance method of depreciation although allow credit if they select the sum of digits method.

Allow up to 3 marks for listing the method and any explanation of how the method is applied.

Allow a further 3 marks if the candidate provides an explanation of why the alternative method is more suitable – e.g. it would allow for increased depreciation allowances in the early years for assets that tend to lose their value quickly e.g. computers, vehicles. It therefore provides a more accurate picture of the book value of the assets.

[Total: 20]

Appendix 1

3 (c)
$$\text{Payback} = \frac{\text{Initial cost} - \text{Residual value}}{\text{Net Returns (gross returns} - \text{running costs)}}$$

Payback for machine A can be calculated as
$$\frac{\$500\,000 - \$80\,000}{\$120\,000 - \$50\,000} = 6.0 \text{ years}$$

Payback for machine B can be calculated as
$$\frac{\$800\,000 - \$100\,000}{\$220\,000 - \$75\,000} = 4.83 \text{ years}$$

Appendix 2

5 (a) (i)
$$\text{Depreciation} = \frac{\text{Initial Purchase Price} - \text{Residual value}}{\text{Useful life in years}}$$

Depreciation for machine A =
$$\frac{\$500\,000 - \$80\,000}{8 \text{ years}} = \$52\,500 \text{ p.a.}$$

Depreciation for machine B =
$$\frac{\$800\,000 - \$100\,000}{10 \text{ years}} = \$70\,000 \text{ p.a.}$$

- (ii) Book value = Initial purchase price – Accumulated depreciation

Book value for machine A =
$$\$500\,000 - (\$52\,500 \times 3) = \$342\,500$$

Book value for machine B =
$$\$800\,000 - (\$70\,000 \times 3) = \$590\,000$$