

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge International Diploma Advanced Level

MARK SCHEME for the May 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.

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- 1 (a) (i) Explain what is meant by an external investor. [2]

Allow 1 mark for a vague response e.g. an outside investor.

Allow the full 2 marks if the answer refers to an independent investor who will contribute large amounts of capital when the risks are considered to be high.

- (ii) Explain one advantage and one disadvantage of raising finance via external investors. [2 × 2 = 4]

Allow 2 marks per advantage/disadvantage that is relevant and well explained.

Advantages – obtain finance when not available elsewhere, external investors often have expertise etc.

Disadvantages – external investor may require seat on the Board, therefore loss of control, external investor may not be committed to long term future of the business etc.

- (b) (i) Explain what is meant by a debenture. [2]

Allow 1 mark for a vague response e.g. loan capital.

Allow the full 2 marks if the answer refers to the issuing of stock in return for capital. The loan attracts a fixed rate of interest and may be secured against assets of the business and may be convertible into shares in the future.

- (ii) Explain why raising finance by issuing debentures might be cheaper than other sources of finance. [2]

Allow 2 marks for any relevant, well explained reason e.g. cost of capital known at the outset, interest payments can be set against tax, no requirement to share profits with debenture holder etc.

- (iii) Suggest two other sources of finance, other than debentures and external investors, that the company could have used and explain one advantage of each of these sources. [2 × 3 = 6]

Allow 1 mark for each relevant source that is identified e.g. bank loan, sale and leaseback etc.

Allow 2 marks for any relevant, well explained advantage that is given e.g. sale and leaseback releases capital but the company retains the assets, bank loans allow the shareholders to retain control etc.

- (c) Explain two possible financial implications of making greater investments in staff training. [2 × 2 = 4]

Allow 2 marks for any relevant, well explained reason that is given e.g. better trained staff are more productive, therefore production costs fall; well trained staff can train new entrants, therefore saving training costs etc.

Negative financial implications e.g. cost of paying external training advisors leads to a rise in costs.

[Total: 20]

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- 2 (a) Using the information in Item A, calculate the number of weeks, to the nearest whole number, that will be required for each of the machines to break-even. [2 × 8 = 16]

For each calculation award marks according to the following criteria:

Level 1 (1–4 marks)

Candidate provides an answer that demonstrates some knowledge of the process required but there are errors/omissions in the calculations.

Level 2 (5–8 marks)

Candidate provides clear evidence of the required process and shows that they can extract the data and correctly complete the calculations.

See Appendix 1(i) for the suggested solution.

- (b) Calculate the yearly contribution for each of the machines. [2 × 2 = 4]

Allow 1 mark for extracting the relevant information and a further 1 mark if the calculation is correct.

See Appendix 1(ii) for the suggested solution.

[Total: 20]

- 3 (a) Explain what is meant by standard cost. [2]

The candidate provides a vague or incomplete answer. 1 mark
The candidate provides a relevant and complete answer. 2 marks

Standard cost is a budgeted cost for producing a unit of output and will include estimated costs for labour, materials and overheads.

- (b) Use the information contained in Item B to calculate:

- (i) the direct material price variance; [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2–3 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

- (ii) the direct material usage variance; [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2–3 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

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(iii) the direct material total variance. [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

(c) Use the information contained in Item B to calculate:

(i) the direct labour rate variance; [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2–3 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

(ii) the direct labour efficiency variance; [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2–3 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

(iii) the direct labour total variance. [3]

Level 1 (1 mark)

Candidate has limited knowledge of method required and/or makes many errors.

Level 2 (2 marks)

Candidate demonstrates knowledge of method necessary and produces accurate results.

For suggested solutions see Appendix 2.

[Total: 20]

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- 4 (a) (i) Identify two internal users who will have an interest in the financial records and accounts of the firm. Explain why they will have an interest. [2 × 2 = 4]
- (ii) Identify two external users who will have an interest in the financial records and accounts of the firm. Explain why they will have an interest. [2 × 2 = 4]

For each user listed allow 1 mark – internal – employees, management etc. / external creditors, government etc.

Allow 1 additional mark if candidate provides a valid reason for interest in the accounts – e.g. wage demands, investment decisions, tax to be paid etc.

- (b) Select and calculate an appropriate financial ratio for each of the internal users and external users identified in 4(a) above. You should use the information contained in Item C to calculate the ratios [4 × 3 = 12]

For identifying an appropriate ratio allow 1 mark.
e.g. profitability ratios, liquidity ratios, investment ratios etc.

For correct calculation of the ratio allow 2 additional marks.

e.g. current ratio = current assets : current liabilities
= (\$84000 + \$61000) : \$61000
= 2.37 : 1

Acid test ratio = current assets – stock: current liabilities
= (\$145000 – \$42000) : \$61000
= 1.68

[Total: 20]

- 5 For published accounts to be useful they must be accurate and produced according to recognised accounting principles.

- (a) Identify three recognised accounting principles. [3 × 1 = 3]

Allow 1 mark per principle identified e.g. historic cost, realisation matching etc.

- (b) Using your own examples, explain how each of the principles that you have identified contributes towards the production of accurate accounts. [3 × 4 = 12]

Allow 1 mark if the answer provides a vague explanation of the principle.

Allow 2 marks if the answer provides a precise and complete explanation of the principle and a further 2 marks if the answer is illustrated with a relevant and correct example.

- (c) Explain why it is necessary to have accounts independently checked by an auditor. [5]

Allow up to 2 marks for each relevant reason up to a maximum of 5 marks.

e.g. it is a legal requirement for incorporated organisations, it ensures that standards of accounting are being followed, it allows an independent person to view the performance of the organisation etc.

[Total: 20]

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Appendix 1 (i)

2 (a)

Machine A

$$\text{Break even period} = \frac{\text{Purchase price}}{\text{Contribution per week}}$$

Contribution = Sales revenue – Running costs (variable costs)

$$\text{Sales revenue per day} = \$4 \times 1200 = \$4800$$

$$\text{Variable costs per day} = \$400 + (1200 \times \$0.25) + (1200 \times \$2.50) = \$3700$$

$$\text{Contribution per day} = \$4800 - \$3700 = \$1100$$

$$\text{Weekly contribution} = \$1100 \times 5 = \$5500$$

$$\text{Break even} = \frac{\$400000}{\$5500} = 72.72 \text{ weeks} = 73 \text{ weeks}$$

Machine B

$$\text{Break even period} = \frac{\text{Purchase price}}{\text{Contribution per week}}$$

Contribution = Sales revenue – Running costs (variable costs)

$$\text{Sales revenue per day} = \$4.50 \times 1800 = \$8100$$

$$\text{Variable costs per day} = \$500 + (1800 \times \$0.25) + (1800 \times \$2) = \$4550$$

$$\text{Contribution per day} = \$8100 - \$4550 = \$3550$$

$$\text{Weekly contribution} = \$3550 \times 6 = \$21300$$

$$\text{Break even} = \frac{\$600000}{\$21300} = 28.16 \text{ weeks} = 28 \text{ weeks}$$

If the candidate chooses to calculate the contribution per unit and then multiplies by the weekly output allow marks as in the scheme provided.

Appendix 1 (ii)

2 (b)

$$\text{Machine A} = \$5500 \times 48 \text{ weeks} = \$264000$$

$$\text{Machine B} = \$21300 \times 40 \text{ weeks} = \$852000$$

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Appendix 2

3 (a) (i)

Direct material price variance

| | |
|--|------------|
| 11000 kilograms of raw materials should have cost @ \$15 | \$165000 |
| Actual Cost | \$160,000 |
| Price Variance | \$5000 (F) |

F = Favourable

(ii)

Direct material usage variance

| | |
|--------------------------------------|--|
| 1000 units produced should have used | 8000 kilograms of materials |
| Actual Usage | 11000 kilograms of materials |
| Usage variance in kilograms | 3000 kilograms of materials × standard cost @ \$15 |
| | = \$45000 (A) |

A = Adverse

(iii)

Direct material total variance

= Direct material price variance + direct material usage variance
= \$5000 (F) + \$45000 (A) = \$40000 (A)

3 (b) (i)

Direct Labour rate variance

| | |
|---|------------|
| Difference between what 3200 hours should have cost and what it actually cost | |
| 3200 hours should have cost @ \$10 per hour | \$32000 |
| Actual cost | \$29500 |
| Direct Labour rate variance | \$2500 (F) |

(ii)

Direct labour efficiency variance

| | |
|---|--|
| 1000 units should have taken @ 3 hrs per unit | 3000 hrs |
| Actual hours | 3200 hrs |
| Efficiency variance in hours | 200 × standard rate per hour @ \$10 = \$2000 (A) |

(iii)

Direct labour total variance = Direct labour rate variance + direct labour efficiency variance
= \$2500 (F) + \$2000 (A)
= \$500 (F)