UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International Diploma Advanced Level

MARK SCHEME for the October 2006 question paper

CAMBRIDGE INTERNATIONAL DIPLOMA IN BUSINESS

5173   Business Finance
Maximum mark 100

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 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.

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

The grade thresholds for various grades are published in the report on the examination for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses.

* CIE will not enter into discussions or correspondence in connection with these mark schemes.

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UNIVERSITY *of* CAMBRIDGE
International Examinations

1 (a) **Explain the difference between a grant and a loan.** **[2]**

Candidates should be able to identify that a grant need not have to be repaid and that interest is not charged, there will be no claim against the assets of the firm.
Allow 1 mark for a vague description.
To achieve 2 marks the answer must draw a comparison.

(b) **Identify and explain one advantage and one disadvantage of obtaining finance by means of a government grant.** **[4]**

Allow 1 mark for each relevant advantage/disadvantage identified.
Allow 1 further mark depending on the quality of the explanation.
Advantage – extra source of funds, not repayable, no interest charged etc.
Disadvantage – need to meet conditions, administration can be time consuming, loss of privacy/control etc.

(c) **(i)** **Explain what is meant by the term insolvent.** **[2]**

Allow 1 mark for a vague statement e.g. lack of money/cash
Allow 2 marks for a definition that refers to inability to meet the current liabilities

(ii) **Describe one consequence of a firm becoming insolvent.** **[2]**

Allow 1 mark if the answer refers to the firm being unable to trade/going out of business.
Allow 2 marks for a well explained relevant answer e.g. the firm will be unable to obtain supplies as creditors will not trade etc.

(d) **(i)** **Explain what is meant by the term working capital.** **[2]**

Allow 1 mark for a vague definition e.g. money used for everyday purposes.
To achieve 2 marks the answer must refer to net current assets and/or provide the relevant formula for calculating working capital.

(ii) **Identify and explain two ways in which Aditya could ensure that he will have sufficient working capital.** **[4]**

Allow 1-2 marks for an answer that provides a vague idea that it will be necessary to monitor cash levels and/or keep expenses to a minimum.
To obtain 3-4 marks the answer must refer to maintaining a balance between the current assets and liabilities – e.g. match the creditor and debtor totals.

(e) **Calculate the book value of the standard balloon at the end of year 2, assuming that the firm will employ the straight line method of depreciation.** **[4]**

Allow up to 2 marks for knowledge of the process required to calculate the depreciation allowance.
Allow a further 2 marks for correct calculation of depreciation allowance and book value.
Annual Allowance = $10,000
After 2 years $20,000
Book value = $30,000 – 20,000 = $10,000

[Total: 20]

2 (a) **Explain, using your own examples, what is meant by the term double entry bookkeeping.** **[8]**

Allow up to 4 marks for defining double entry bookkeeping – the answer should include references to dual recording of transactions with both the positive and negative aspects of the entry recorded – ensuring that the entries will produce a balance.
Allow up to 4 further marks for correctly worked examples which make reference to different books of account e.g. cash book, purchase ledger etc.

(b) **Identify and explain three additional principles of accounting that Aditya needs to apply in order to produce accurate accounts.** **[12]**

Allow 1 mark for identifying an appropriate principle e.g. matching, realisation etc.
Allow a further 3 marks for explanation of how the principle applies. To achieve a full award the explanation must relate the principle to accuracy in the accounts.
Maximum of 4 marks per principle well explained.

[Total: 20]

3 (a) **Using the information in the case study, calculate the number of weeks, to the nearest whole number, that will be required for each of the balloons to break-even.**
(You should assume that the weekly maximum of flights (6) will be achieved and that there will be flights for the full 40-week period.) **[16]**

Allow up to 4 marks for demonstrating knowledge of the process required to calculate break-even point- i.e. total costs matched by total revenue, total contribution matching total fixed costs etc.
Allow up to 6 marks per calculation.

Level 1 – (1-3 marks) Some of the relevant data extracted and correctly employed but there are errors in the calculations and incorrect totals.

Level 2 – (4-6 marks) – All relevant data employed with fewer/no errors and correct totals produced.

If candidate provides formula but with no attempt at calculation allow a maximum of 4 marks.

See Appendix 1 for suggested solution.

(b) Calculate the weekly contribution for each of the balloons. **[4]**

Allow up to 2 marks for knowledge of process /formula required for calculating contribution.
Allow 2 further marks for correct extraction of data and producing a correct solution.

See Appendix 2 for suggested solution.

[Total: 20]

4 (a) Using the information in the case study, calculate the A.R.R.% (Accounting Rate of Return) for both the standard balloon and the deluxe balloon.
(You should assume that the purchase of the balloon also requires the purchase of the recovery vehicle) **[16]**

Allow up to 4 marks for providing the formula required to calculate ARR% and for demonstrating how to apply the formula.
Allow up to 6 marks per calculation.

Level 1 – (1-3 marks) Some of the relevant data extracted and correctly employed but there are errors in the calculations and incorrect totals.

Level 2 – (4-6 marks) – All relevant data employed with fewer/no errors and correct totals produced.

If candidate provides formula but with no attempt at calculation allow a maximum of 4.

See Appendix 3 for suggested solution.

(b) Identify and explain one other method of investment appraisal that could be used to assess the financial viability of the project. **[4]**

Allow 1 mark for identifying a method – payback, net present value, internal rate of return.
Allow up to 3 further marks for demonstrating how the method is applied and for showing how it differs from ARR%

[Total: 20]

5 (a) Describe the legal and financial differences between a sole trader, a limited partnership and a limited company. **[12]**

Allow up to 3 marks for defining the different types of organisation.
Allow up to a further 3 marks per structure for explaining how they operate and how they differ from each other.
To achieve a full award the answer must include a discussion of the concept of limited liability and this concept must be explained precisely.

(b) State, with reasons, which of the forms of organisation in (a) above, you would recommend for Aditya's business. **[8]**

Allow up to 4 marks per well presented reason for suggesting a particular structure for the business e.g. limited company allows for limited liability and therefore greater protection for the individual – may encourage greater risk taking leading to greater profits.

[Total; 20]

Appendix 1

Break-even

Standard Balloon

Break even point = Total fixed costs
                          Contribution

Contribution = Revenue – marginal cost

Total fixed cost = $30,000 + 5,000 + 5,700 + 10,000 = $50,700

Revenue = $600 per flight
Operating costs = $100 +100 + 75 = $275 per flight
Contribution = $600 – 275 = $325

Break even = $50,700   = 156 flights
                    $325
At a maximum of 6 flights per week – 26 weeks

Deluxe Balloon

Break even point = Total fixed costs
                          Contribution

Contribution = Revenue – marginal cost

Total fixed cost = $50,000 + 5,000 + 5,700 + 10,000 = $70,700

Revenue = $750 per flight
Operating costs = $150 +100 + 75 = $325 per flight
Contribution = $750 – 325 = $425

Break even = $70,700   = 166 flights
                    $425
At a maximum of 6 flights per week – 28 weeks

Appendix 2

Contribution = Revenue – marginal cost

Standard

Revenue = $600 per flight
Operating costs = $100 +100 + 75 = $275 per flight
Contribution = $600 – 275 = $325 per flight
Assuming 6 flights per week = $325 X 6 = $1,950

Deluxe

Revenue = $750 per flight
Operating costs = $150 +100 + 75 = $325 per flight
Contribution = $750 – 325 = $425 per flight
Assuming 6 flights per week = $425 X 6 = $2,550

Appendix 3

Standard

Initial purchase = $30,000 + 10,000 = $40,000

Fees and licences = $10,700 per year X 3 = $32,100
Operating costs= $275 X 6 X 40 = $66,000 per year x 3 = $198,000
Revenue = $600 X 6 X 40 =$144,000 per year X 3 = $432,000
Net revenue = $432,000 – (198,000 + 32,100 + 40,000)
$= $161,900$
Annual net revenue = $ $\underline{161,900}$ = $53,966
                              3

ARR% = $\underline{53,966}$ x 100 = 134%
            40,000

Deluxe

Initial purchase = $50,000 + 10,000 = $60,000

Fees and licences = $10,700 per year X 35 = $53,500
Operating costs = $325 X 6 X 40 = $78,000 per year x 5 = $390,000
Revenue = $750 X 6 X 40 = $180,000 per year X 5 = $900,000
Net revenue = $900,000 – (390,000 + 53,500 + 60,000)
$= $396,500$
Annual net revenue = $ $\underline{396,500}$ = $79,300
                              5

ARR% = $\underline{79,300}$ x 100 = 132%
            60,000