# MARKETING FINANCE 

## WEDNESDAY, AUGUST 20, 2003. TIME: 9.30 am-12.30 pm

Please attempt ONE question from Section A and THREE questions from Section B. (If more than the specified number of questions are attempted, delete those you do not wish to have marked. Otherwise the Examiner will mark the FIRST four questions.)

All questions carry equal marks.
Do NOT repeat question in answer, but show clearly the number of the question attempted on the appropriate page of the Answer Book.

## SECTION A <br> (Answer ONE question only)

1. Write notes on:
(a) Working capital management.
(b) Spontaneous sources of finance.
(c) Term loans.
2. Should the accountant in an organization be a member of the senior management team? Why?

## SECTION B <br> (Answer THREE questions only)

3. Information has been provided for two businesses in the same industry as shown below:

Extracts from Trading and Profit and Loss Accounts for year ended 31 ${ }^{\text {st }}$ December 2002:

|  | M Ltd. <br> €'000's | N Ltd. |
| :--- | ---: | ---: |
| Sales | 4,760 | $€^{\prime} \mathbf{0 0 0 ’ s}$ |
| Gross Profit | 2,652 | 3,672 |
| Net Profit | 988 | 2,108 |

Balance Sheets as at $31^{\text {st }}$ December 2002: €'000's €'000's €'000's €'000's
Fixed Assets:

At cost
Less: accumulated depreciation
5,576
2,516
2,448
3,128

- 544

1,972

Current Assets:
Stock 780
Debtors 444
Bank 170
1,394

Current Liabilities:
Creditors 444
Proposed dividends
100
544
314
60
374
Net Current Assets
850
307

3,978
2,279
€'000's
€'000's
Financed by:
Share Capital
1,000
400
Profit \& Loss Account 1,346
1,096

10\% Debentures
1,632
783
3,978
2,279

## Required:

(a) Calculate the following ratios for each factory using the format:
$\underline{\text { Ratio Formula }} \underline{\text { M Ltd. }}$
(i) Gross Profit \%
(ii) Net Profit \%
(iii) Return on Capital Employed (ROCE)
(iv) Number of days in debtors
(v) Number of days in creditors
(vi) Debt/Equity ratio
(vii) Current Ratio
(viii) Acid Test Ratio
(b) Which business is more profitable? Give reasons for your answer.
4. A printing and packaging firm produces jobs to individual customer requirements. An enquiry has been received from one of the company's regular customers for a price on packaging for a new product range. As the demand for the new product is uncertain, the company has been asked to quote for two levels of activity. The expected requirements per unit are as follows:

Direct Materials: ..... $€$
Cardboard: 2 square metres @ €8 per m² ..... 16
Printing inks A1: 0.25 litres @ €20/litre ..... 5
C9: 0.1 litres @ €30/litre ..... 3

Staples and tape are provided for by adding $10 \%$ to cardboard and printing inks cost.

| Direct Labour: | € |  |
| :--- | :--- | ---: |
| Cutting Department: | 0.1 hrs @ €10/hour | 1 |
| Printing Department: | 0.25 hrs @ €16/hour | 4 |
| Finishing Department: | 0.15 hrs @ €8/hour | 1.20 |

Overheads are recovered using departmental overhead absorption rates. A machine hour rate is used in the cutting department and printing department and a direct labour hour rate is used in the finishing department. Extracts from the annual budget are given overleaf:
P.T.O.

| Department | Production | Machine | Direct Labour |
| :--- | ---: | ---: | ---: |
|  | Overheads | Hours | Hours |
| Cutting | $€ 150,000$ | 15,000 | 4,000 |
| Printing | $€ 60,000$ | 10,000 | 5,000 |
| Finishing | $€ 80,000$ | 4,000 | 10,000 |

## Note:

1. If the quantity of the particular type of cardboard required for this order exceeds $25,000 \mathrm{~m}^{2}$, the supplying company will offer a $10 \%$ bulk quantity discount on the total order.
2. Production above 10,000 units will reduce the time taken for each unit in the printing department to an average of 0.2 hours per unit for all units.
3. In order to cover administration costs the company usually adds $15 \%$ to production costs.

## Required:

(a) Calculate the overhead absorption rates for each department.
(b) Calculate separately the cost for orders of:
(i) 10,000 units
(ii) 20,000 units
(16 marks)
(c) Calculate the price to be quoted to the customer for the orders of (i) 10,000 units and (ii) 20,000 units if the company wishes to earn a profit of $25 \%$ on sales.
5. Maria, a recently graduated computer programmer wishes to start her own business. She has two projects from College which have market potential but will need further development - a payroll program and a materials control program. She has prepared the following forecasts for each program:

Payroll: The development cost is estimated at $€ 30,000$ with annual cash flows of:

| Year | Cash Flow |
| :---: | :---: |
| 1 | 12,000 |
| 2 | 14,000 |
| 3 | 14,000 |
| 4 | 18,000 |

Materials Control: The extra work on this program has an estimated cost of $€ 95,000$ and is expected to return cash flows of $€ 45,000, € 35,000$ and $€ 30,000$ for Years 1, 2 and 3 respectively.

Each project will have a working capital requirement of $€ 15,000$ from the beginning of the project. There is no residual value expected on any of the projects. Maria expects the cost of capital to be $10 \%$.

## Discount Factors

## Present Value of $€ 1$

| Year | $\mathbf{5 \%}$ | $\mathbf{1 0 \%}$ | $\mathbf{1 5 \%}$ | $\mathbf{2 0 \%}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | .952 | .909 | .870 | .833 |
| 2 | .907 | .826 | .756 | .694 |
| 3 | .864 | .751 | .658 | .579 |
| 4 | .822 | .683 | .572 | .482 |
| 5 | .784 | .621 | .497 | .402 |
| 6 | .746 | .564 | .432 | .335 |

## Required:

(a) Evaluate each of the two projects using:
(i) Payback
(ii) Net Present Value
(iii) Internal Rate of Return
(b) If only one project could be pursued, which would you recommend? Give reasons.
6. The standard cost card for the single project "Elle" produced by the Ayebee Co. Ltd. is given below:

## Direct Material:

5 Kgs @ €8/Kg €40
Direct Labour:
Department A 6 hours @ €10/hr 60
Department B 2 hours @ €7/hour 14
Fixed Production Overhead
$\ldots 40$
€154

The fixed production overhead cost per unit is based on a budget of 12,000 units per annum. Production is evenly spread throughout the year. The budgeted selling price is $€ 200$ per unit.

During January 2003 the company produced 1,100 units. The actual costs are given below:

Direct Material:
6,000 Kgs
€46,800

Direct Labour:
Department A - 6,500 hours 68,250
Department B - 2,300 hours 16,675
Fixed Production Overhead 45,500

## Note:

Actual sales were 1,100 units and sales revenue was $€ 214,500$.

## Required:

(a) Calculate all relevant sales and cost variances.
(b) Give two possible reasons for the sales price variance.
(5 marks)
7. The following summarized accounts have been prepared for ABC Co Ltd.:

## Balance Sheets as at $31^{\text {st }}$ December

20012002
€
$€$
€
$€$
Fixed Assets:
Fixed Assets at
Less: Accumula
Current Assets:

| Stock | 13,020 | 12,614 |
| :--- | ---: | ---: |
| Debtors | 17,136 | 17,503 |
| Bank | $\underline{1,904}$ | $\underline{-}$ |
|  | 32,060 | 30,117 |
| Current Liabilities: |  |  |
| Creditors | 7,252 | 6,489 |
| Bank overdraft | - | 406 |
| Taxation | 2,996 | 2,170 |
| Proposed Dividends | $\underline{1,750}$ | $\underline{2,100}$ |
|  | 11,998 | 11,165 |

Net Current Assets

| $\underline{20,062}$ | $\underline{18,952}$ |
| :--- | :--- |
| 40,222 | $\underline{44,380}$ |

Financed by:
Ordinary Share Capital
35,000
35,000
Profit \& Loss Account
$\frac{5,222}{40,222}$
9,380
40,222
44,380
There were no sales of fixed assets during the year ended 31 ${ }^{\text {st }}$ December 2002.

## Profit and Loss Account for the year ended 31 ${ }^{\text {st }}$ December 2002

Net Profit before Tax 8,428

Taxation $\quad(2,170)$
Profit after Taxation 6,258
Profit \& Loss Account balance $31^{\text {st }}$ Dec $2001 \quad 5,222$
Proposed Dividend
$(2,100)$
Profit \& Loss balance $31^{\text {st }}$ Dec 2002 carried forward 9,380

## Required:

Prepare a cash flow statement according to FRS1 for the year ended $31^{\text {st }}$ December 2002.
(25 marks)

