Foundation Certificate in Marketing - Stage 2



## MARKETING FINANCE

# WEDNESDAY, MAY 8, 2002. 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 (Answer ONE question only)

- 1. Discuss the ways that the accountant in an organisation can help marketing and sales departments function more efficiently.
- 2. Evaluate the following sources of business finance:
  - (a) Debentures
  - (b) Factoring
  - (c) Term Loans

**P.T.O.** 

## SECTION B (Answer THREE questions only)

3. A company operating from two factories produces toiletries for the European market. Information has been provided for each factory which operate independently as follows:

## Extracts from Trading and Profit and Loss Accounts for year ended 31<sup>st</sup> December 2001

	Factory A		<b>Factory B</b>	
	€000s	€000s	€000s	€000s
Sales		3,000		3,840
Less: Cost of Sales		2,250		<u>2,996</u>
Gross Profit		750		844
Less: Expenses		510		614
Net Profit		240		230

# **Balance Sheets as at 31<sup>st</sup> December 2001**

	€000s	€000s	€000s	€000s
Fixed Assets:				
At cost	856		1,030	
Less: accumulated depreciation	<u>400</u>	456	440	590
Current Assets:				
Stock	280		250	
Debtors	376		322	
Bank	40			
	<u>696</u>		572	
Current Liabilities:				
Creditors	190		374	
Bank overdraft			20	
	190		394	
Net Current Assets		<u>506</u>		178
		<u>962</u>		<u>768</u>
Financed by:				
Share Capital		750		480
Profit & Loss Account		<u>212</u>		288
		962		768

## **Required:**

- (a) Calculate the following ratios for each factory using the format: <u>Ratio</u> <u>Formula</u> <u>Factory A</u> <u>Factory B</u>
  - (i) Gross Profit %
  - (ii) Net Profit %
  - (iii) Number of days in debtors
  - (iv) Number of days in creditors
  - (v) Stock turnover
  - (vi) Current Ratio
  - (vii) Acid Test Ratio
  - (viii) Return on Capital Employed (ROCE) (20 marks)
- (b) Comment briefly on the debtor collections and creditor payments of each factory. Identify the factory which is more efficient in this regard. (5 marks)

**P.T.O.** 

4. CostRight Ltd. at a recent management meeting examined the costs for the previous year when 25,000 units were produced as follows:

Direct Materials (100% variable)	€300,000
Direct Labour ((75% variable)	€200,000
Production Overhead (100% fixed)	€175,000

The company produces a single product which has a selling price of  $\notin 40$  per unit. The budgeted sales level is 25,000 per annum but current capacity would allow the company to increase production by 30%. Management are examining various options to improve performance in the coming year:

#### Option A:

Reduce the selling price by 10% and sell up to full capacity. At full capacity fixed costs would increase by  $\mathfrak{S}0,000$ .

#### Option B:

Increase the selling price by 15%. At this price the marketing manager has estimated that 20,000 units could be sold.

#### Option C:

Continue with the current sales level and price.

## **Required:**

- (a) Calculate
  (i) variable costs
  (ii) fixed costs
  (3 marks)
- (b) For each option separately calculate c/s ratios and break even
  - point. (12 marks)
  - (c) Calculate the margin of safety and the profit for Option C.

(5 marks)

(d) How many units must be sold with the present cost structure to earn a profit of €500,000? (5 marks)

5. Widget Ltd. must replace equipment that has reached the end of its useful economic life. The new equipment must have a production capability of 300,000 units per annum. The engineer has identified two possible machines:

<u>Machine X</u>: This machine will cost G50,000 and has a useful economic life of eight years. It has a production capacity of 400,000 units per annum. The expected returns from the machine are:

Year 1	€285,000
2	€250,000
3	€250,000
4	€220,000
5	€220,000
6	<b>€</b> 190,000
7	€175,000
8	€165,000

Machine X will have a residual value of  $\notin$ 70,000 and will be disposed of at the beginning of year 9. There will be working capital requirement of  $\notin$ 50,000 from the beginning of the project, which will be released at the end of the useful life of the equipment.

<u>Machine Y</u>: This machine will cost  $\notin 400,000$  and is expected to last six years. However, as the production capacity is only 180,000 units per annum it will be necessary to purchase two of these machines. The expected returns from <u>each</u> machine are  $\notin 120,000$  per annum with a residual value of  $\notin 30,000$  for each machine. The machines will be disposed of at the beginning of year 7. Working capital of  $\notin 15,000$  per machine will be required from the beginning, and will be released at the end of the project.

The company has a cost of capital of 15%. Discount Factors are provided on next page (Page 6).

## **<u>Required</u>**:

Evaluate Machine X and Machine Y using

- (i) Payback
- (ii) Net Present Value

and recommend a course of action. Give reasons for your answer.

(25 marks) **P.T.O.** 

# **Discount Factors at 15%**

Year	Present Value of €1	Present Value of € Annually
1	.870	.870
2	.756	1.626
3	.658	2.284
4	.572	2.856
5	.497	3.353
6	.432	3.785
7	.376	4.161
8	.327	4.488
9	.284	4.772

6. The Colourful Paint Co. produces a range of paints and supplies directly to the trade. One of the products is a 10 litre tub of ceiling paint which has the following standard variable cost:

Direct Material:	12 litres @ €1.00per litre	<b>€</b> 12
	1 plastic tub	2
Direct Labour:	1 hour @ €8 per hour	8
Variable overhead:	1 hour @ €2 per hour	2
	-	24

The paint has a selling price of  $\leq 30$  per tub and the company expects to sell 10,500 tubs per month. The actual results for December 2001 were:

Production: 10,000 tubs		
Sales: 10,000 tubs		€312,500
Variable Cost of Sales:		
Direct material:	115,000 litres	126,500
	10,500 plastic tubs	19,425
Direct labour:	9,800 hours	81,340
Variable overhead		<u>19,110</u>
Actual contribution		€ <u>66,125</u>

## **Required:**

Calculate all relevant sales and cost variances for December. (25 marks)

**P.T.O.** 

7. The following summarised accounts have been prepared for the XY Co. Ltd:

Net Profit before tax

Taxation

Proposed Dividend Retained Profit				<u>180,000</u> <u>45,000</u>
Balar	ce Sheets as a	at 31 <sup>st</sup> Decen	ıber	
	20	00	200	01
	€	€	€	€
Fixed Assets:				
Plant & Machinery cost	1,800,000		2,475,000	
Less: Accumulated				
Depreciation	450,000	1,350,000	<u>810,000</u>	1,665,000
Current Assets:				
Stock	225,000		405,000	
Debtors	315,000		225,000	
Cash	45,000		9,000	
	585,000		639,000	
Less:				
Current Liabilities				
Creditors	202,500		247,500	
Taxation	81,000		112,500	
Proposed Dividends	<u>157,500</u>		<u>180,000</u>	
	441,000		540,000	
Net Current Assets		144,000		99,000
		<u>1,494,000</u>		<u>1,764,000</u>
Financed by:				
Ordinary Share Capital		900,000		1,125,000
Profit & Loss Account		594,000		639,000
		<u>1,494,000</u>		<u>1,764,000</u>

# **Profit and Loss Account for the year ended 31<sup>st</sup> December 2001**

€

337,500 112,500

225,000

There were no sales of fixed assets during the year ended 31<sup>st</sup> December 2001.

#### **Required:**

Prepare a cash flow statement according to FRS1 for the year ended 31<sup>st</sup> December 2001. (25 marks)