MANAGEMENT ACCOUNTING

Foundation Stage examination
9 June 1999

From 10.00 am to 1.00 pm
plus ten minutes reading time from 9.50 am to 10.00 am.

Instructions to candidates

Answer ***all five*** *questions. The marks available for each question are shown in italics in the right-hand margin.*

All workings should be shown. Where calculations are required using formulae, calculators may be used but steps in the workings must be shown. Calculations with no evidence of this (for example, using the scientific functions of calculators)d will receive no credit. Programmable calculators are not permitted in the examinations room.

Formula sheets, statistical tables, graph paper and cash analysis paper are available from the invigilator, where applicable.

1 Brian plc produce and sell a single product. They have prepared the following budgeted Profit and Loss Account for the 6 months July to December 1999.

	Jul	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
	£	**£**	**£**	**£**	**£**	**£**
Sales	18,000	25,200	19,600	21,600	26,000	26,000
Cost of sales:						
Direct materials	12,000	16,800	13,200	14,400	18,000	18,000
Direct wages	2,000	2,800	2,200	2,400	3,000	3,000
Electricity	1,200	1,200	1,200	1,000	800	800
Office expenses	300	340	200	320	360	360
Depreciation	900	900	1,800	1,800	1,800	1,800
Total Costs	16,400	22,040	18,600	19,920	23,960	23,960
Profit	1,600	3,160	1,000	1,680	2,040	2,040

Additional information:

(i) Opening cash balance on 1 July 1999 is expected to be £4,000 in hand.

(ii) All sales are made on credit. Past experience has shown that 60% of debtors pay in the month after sales have been made and 40% pay in the second month following the sale. Sales in the months of May 1999 and June 1999 are expected to be £16,000 and £18,000 respectively.

(iii) Material purchases are made on credit; creditors allow one month's credit. Purchases for the month of June 1999 are expected to total £12,000.

(iv) Wages and office expenses are paid in the month in which they are incurred.

(v) Brian will be replacing a piece of equipment in August 1999. The new machine costs £44,000 and the old machinery will be sold for a cash scrap value of £2,000 in August. Payment for the new machine is to be made in two equal instalments in October and November 1999.

(vi) Electricity is paid quarterly, in arrears, in September and December.

(vii) Tax will have to be paid in December amounting to £1,600.

- **Requirement for question 1**

(a) Prepare a monthly cash budget for the six month period, July to December 1999. *12*

(b) Advise Brian plc on the possible action they might take to overcome any cash deficit. Use the monthly cash budget you have prepared in (a) to illustrate the advice and to emphasise the importance of preparing cash budgets. *8*

(c) Briefly explain five differences between Management Accounting and Financial Accounting. *5*

(25)

2

Florence plc are electrical component manufacturers based in Glendale. The company produce one single standard product, the Blemma which is used in the manufacture of guitar amplifiers. The cost accounts show that the standard marginal cost of a Blemma is as follows:

	£
Direct Materials	50.00
Direct Wages	32.50
Variable Production Overhead	2.50
	85.00

At last month's board meeting Florence's Cost Accountant, Billy Mountain, was asked a number of questions about prospects for the forthcoming year. Although stating that information was incomplete and that he had not brought detailed notes with him, Billy managed to provide the following information:

No. of units of Blemma to be produced and sold	100,000
Total contribution expected	£3,000,000
Fixed costs would total:	£2,500,000
made up of:	
Production Overhead	£1,200,000
Administration Overhead	£700,000
Marketing Overhead	£600,000

Since the meeting, three of the directors have written to Billy with suggestions which they believe will improve the situation and increase the profitability of Florence. Their alternative strategies are as follows:

Option 1

The Financial Director suggests that the Blemma is underpriced and that the market could stand a 10% price increase. In addition, he suggests that with an increase in advertising of £150,000, sales would increase to 120,000 units, even at an increased selling price, fixed production overhead would increase by £300,000 and administration overheads increase by £250,000.

Option 2

The Production Director suggests that the selling price of the Blemma should be reduced by 10%. He believes this would increase sales by some 25%, fixed production overhead would increase by £100,000 and fixed marketing overhead would increase by £50,000.

Option 3

The Marketing Director believes a more radical approach is necessary. He suggests that if a new American production machine is bought (cost £1,500,000) then the materials cost per unit should reduce to £45.00 each. The wages cost should also come down to £30 for each Blemma. The life expectancy of the machine would be 5 years, with no scrap value. With a small increase in the advertising budget of £75,000 the Marketing Director expects that sales would increase slightly to 105,000 (assuming selling price remains the same as present), and fixed production overheads would increase by the depreciation of this machine. (Assume straight line method of calculation.)

- **Requirement for question 2**

(a) Evaluate the existing expected profitability of the Blemma and consider the alternative profit or losses that could result from the adoption of each of the three options put forward by the Directors. *15*

(b) Comment on the results of your analysis in (a) and advise the Board of Directors, including reference to any reservations concerning the figures advised by the Directors. *5*

(20)

3

Ermintrude plc is a medium sized company engaged in the manufacture and sale of specialist confectionery products. The company is organised into a number of cost centres, one of which is responsible for the production of chocolate bars. Ermintrude operates a standard costing system and the following information is available:

(a) Standard Performance data for a chocolate bar are as follows:

(i) Each chocolate bar should contain 100 gms of coconut and banana filling surrounded by 150 gms of milk chocolate.

(ii) The standard cost of the filling is £0.25 per 100 gms and the standard cost of milk chocolate is £0.20 per 100gms.

(iii) Standard performance for the labour force is 2 minutes per bar at an hourly wage rate of £10.00 per hour.

(b) The actual performance of the chocolate bar cost centre during the last four week costing period was ascertained to be as follows:

Chocolate bars produced	25,000	
Filling used	2,600	kg
Milk chocolate used	3,800	kg
Cost of filling	£6,400	
Cost of milk chocolate	£7,500	
Labour hours worked	850	hr
Labour costs	£8,400	

Note: 1000 gms = 1 kg

- **Requirement for question 3**

From the above information you are required to:

(a) Calculate all the materials and labour variances for the chocolate bar cost centre, for the last four week costing period. *12*

(b) Comment on the possible causes for the variances. *4*

(c) The chocolate bar production area is a *cost centre*. Name two other types of responsibility centre and briefly explain how they are different from a cost centre. *4*

(20)

4

Dylan plc are a small company engaged in the refining of crude oil into petrol. The basic raw material, crude oil, passes through process A and is then transferred to process B where further materials are added (anti-knock reagents) and more processing takes place. The following costing information is available:

Process A

Crude oil input; 10,000 litres at £0.25 per litre
Labour costs: £1,600
Production overhead: 50% of labour costs

Process B

Reagents added: 8,000 litres at £0.10 per litre
Labour costs: £1,298
Production overhead: 100% of labour costs

There is a normal loss of 10% of input in process A and 20% of input in process B. Production lost can be sold as scrap without further processing for 4 pence per litre from process A and 2 pence per litre from process B. Actual output from process A was 8,500 litres and from process B 13,300 litres. There is no work in progress at the beginning or end of the costing period and no finished goods (petrol) in stock at the beginning of the costing period.

- **Requirement for question 4**

(a) You are required to prepare:

(i) Process accounts for Process A and Process B.
(ii) Abnormal loss account.
(iii) Normal loss account.
(iv) Abnormal gain account.

16

(b) Apart from crediting the scrap value to the process account, describe an alternative treatment for scrap values and the reasons for adopting this alternative. *4*

(20)

5

Dougal plc is a small manufacturing company situated in the city of Magicville. They produce a single product which is used in the production of playground equipment.

The cost of this product is as follows:

Direct Materials	£7 per unit
Direct Wages	£10 per unit
Fixed Production Overheads	£3 per unit (based on normal production level of 20,000 units per period)

The selling price of the product is £30 each.

Production and sales quantities for Periods I and II are as follows:

	Period I	**Period II**
Production	20,000 units	20,000 units
Sales	18,000 units	22,000 units

(NB: There were no opening stocks at the start of Period I)

- **Requirement for question 5**

(a) Prepare operating statements for each of the two periods using:

(i) Marginal costing.
(ii) Absorption costing. *8*

(b) Prepare a statement that reconciles the difference between the annual profits reported in the operating statements in (a). *3*

(c) Describe the advantages and disadvantages of each approach. *4*

(15)