

Ollscoil na hÉireann, Gaillimh
NATIONAL UNIVERSITY OF IRELAND, GALWAY

Semester One Examinations 1999/2000

MBA EXAMINATION

Management Accounting & Control (AY512)

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TIME ALLOWED: TWO HOURS

Candidates are required to attempt any TWO questions

Question 1

The Western Division of Emerald Containers Limited makes and sells boxes of containers in the Connacht region. The budget for the year ended 30 June 1999 was as follows:

	£	£
Sales (note 1)		960,000
Cost of sales (note 4)		<u>636,000</u>
Gross profit		324,000
Distribution costs (note 2)	140,000	
Administrative expenses (note 3)	<u>88,000</u>	
		<u>228,000</u>
Net profit		<u>96,000</u>

Note 1: Budgeted sales at £16 per unit were 60,000, which represented a 20% market share of the estimated industry volume.

Note 2: Distribution costs were estimated at £1 per unit variable and £80,000 fixed.

Note 3: Administrative expenses are all fixed.

Note 4: The budget for cost of sales was based on the following estimates:

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	Variable per unit £	Fixed £	Total £
Direct material			
10 kgs. at £0.54 per kg.	5.40		324,000
Direct labour			
0.2 hours at £7.00 per hour	1.40		84,000
Overheads			
Indirect labour	0.40	64,000	88,000
Indirect materials	0.20		12,000
Other overheads	<u>0.60</u>	<u>92,000</u>	<u>128,000</u>
	<u>8.00</u>	<u>£156,000</u>	<u>£636,000</u>

During the year the division produced 50,000 units and sold 55,000 units out of the total industry volume of 250,000. (Since the divisional managers foresaw another difficult few years at least for the industry, they decided to cut production below sales and reduce stock levels.) The company uses a full absorption costing system, valuing closing stocks and calculating cost of sales at the full standard cost of £10.60 per unit. The results were as follows:

	£	£
Sales		825,000
Cost of sales	583,000	
Manufacturing variances (note 6)	<u>34,800</u>	
		<u>617,800</u>
Gross profit		207,200
Distribution costs (note 5)	130,000	
Administrative expenses	<u>85,000</u>	
		<u>215,000</u>
Net loss		<u>(7,800)</u>

Note 5: Variable costs were £52,500 and fixed costs £77,500.

Note 6: Actual manufacturing costs and the calculation of the overall variance were as follows:

	£
Direct material (495,000 kgs.)	277,200
Direct labour (9,600 hours)	69,600
Indirect labour	87,000
Indirect materials	11,000
Other overheads	<u>120,000</u>
	564,000
Full standard cost of goods produced	<u>530,000</u>
Variances	<u>34,800</u>

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You are required to:

- (a) prepare a variance analysis report containing a comprehensive reconciliation of the budgeted profit for the year ended 30 June 1999 with the actual loss;
(34 marks)
- (b) write a report for the managing director of Emerald Containers Limited giving your assessment of the performance of the Western Division and indicating any ways in which you feel that the information needed for a full assessment of performance is unavailable.

(16 marks)

Total: 50 marks

Question 2

Decimur plc is a food company which operates through a number of divisions. The following data relate to the activities of two of the divisions for the year ended 30 September 1999:

	Division X £000s	Division Y £000s
Sales	51,600	83,600
Profit on sale of fixed assets	<u>51,600</u>	<u>3,500</u> 87,100
Variable cost of production	32,900	56,450
Depreciation	2,500	2,500
Other divisional overheads	10,560	17,100
Allocated head office costs	<u>3,290</u>	<u>5,250</u> 81,300
	<u>49,250</u>	
Fixed assets (cost less accumulated depreciation)	12,500	22,500
Stocks	3,000	6,000
Debtors	6,000	10,000
Bank overdraft	1,500	4,000
Creditors	3,000	9,000

Both divisions have been in operation for many years. Division Y has recently had a major replacement programme for fixed assets. The new manager of Division X is unhappy that a major replacement programme which took place in her division three years ago was undertaken at just the wrong time; machinery which has recently come on the market is much more efficient, and several competitors have purchased this and have been able to cut

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prices and increase business at the expense of Division X. The new manager is keen to acquire this machinery, but head office must approve all capital expenditure over £50,000 and the head office view is that it is too soon after the last replacement programme to allow for any further upgrading of Division X's machinery.

The cost of capital for Decimur plc is 10%, and it is agreed that this is appropriate for each division.

Divisional performance has in the past been measured on the basis of return on capital employed, but under increasing complaints about unfairness, particularly from the newly promoted manager of Division X, head office has decided to consider as alternatives residual income and controllable profit.

You are required to:

- (a) use the data available to produce calculations of return on capital employed, residual income and controllable profit, stating any assumptions that you feel it necessary to make about the data provided;

(18 marks)

- (b) outline your views on the relative merits of each of the three methods, distinguishing in your answer between their suitability for assessment of divisional performance and their suitability for assessment of managerial performance if you think that this distinction is useful.

(32 marks)

Total: 50 marks

Question 3

In the context of preparing and interpreting budgetary information, you are required to explain why each of the following four assumptions might be made by accountants when designing a system of budgeting, and to set out in each case any arguments which, in your view, may cast doubts on their validity:

- (a) participation by managers in the budget-setting process leads to better performance;
- (b) a manager's budget should exclude all matters which are not completely under his or her control;
- (c) budgeted performance should be reasonably attainable but not too loose;
- (d) budget statements should include only matters which can be easily and accurately measured in money terms.

Total: 50 marks