

**OLLSCOIL NA hÉIREANN, GAILLIMH**  
**NATIONAL UNIVERSITY OF IRELAND, GALWAY**

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**SUMMER EXAMINATIONS, 1999/2000**

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**BACHELOR OF COMMERCE (EVENING) - FIRST YEAR**

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**ACCOUNTING & FINANCIAL ANALYSIS – AY103**

**Professor R. W. Scapens**  
**Professor J. F. Collins**  
**Ms. G. Robbins**

**INSTRUCTIONS TO CANDIDATES:**

**Answer TWO questions from Section A and TWO questions from Section B.**

**Use a separate answer book for each section. All questions carry equal marks.**

**Time Allowed:      THREE HOURS**

**SECTION A**  
**(Answer TWO questions from this Section)**

**Question 1:**

The following information has been extracted from the accounts of Goddard Distribution Services Ltd.

**Profit and Loss Account for the Year to 30 April**

	<u>1999</u> £000s	<u>2000</u> £000s
Turnover (all credit sales)	19,125	28,750
Less Cost of Sales	<u>14,500</u>	<u>23,575</u>
Gross Profit	4,625	5,175
Other expenses	375	425
Loan interest	<u>125</u>	<u>875</u>
Profit before taxation	4,125	3,875
Taxation	<u>1,500</u>	<u>1,375</u>
Profit after taxation	2,625	2,500
Dividends (all ordinary shares)	<u>750</u>	<u>750</u>
Retained profits	<u>1,875</u>	<u>1,750</u>

**Balance Sheet at 30 April**

	<u>1999</u> £000s	<u>2000</u> £000s
Tangible Fixed Assets	25,125	28,375
Stocks	3,750	6,125
Trade Debtors	3,000	9,500
Cash	<u>2,250</u>	<u>125</u>
	9,000	15,750
Creditors	<u>6,000</u>	<u>6,750</u>
Net Current Assets/Working Capital	<u>3,000</u>	<u>9,000</u>
	28,125	37,375
Loans and other borrowings	<u>875</u>	<u>8,375</u>
	<u>27,250</u>	<u>29,000</u>

Question 1 Continued overleaf..

**Question 1 Continued..**

	<u>1999</u> £000s	<u>2000</u> £000s
Called-up share capital	14,750	14,750
Profit and loss account	<u>12,500</u>	<u>14,250</u>
	<u>27,250</u>	<u>29,000</u>

**Additional Information:**

During the year to 30 April 2000, the company tried to stimulate sales by reducing the selling price of its products and by offering more generous credit terms to its customers.

**You are required to:**

- (a) Calculate ten accounting ratios specifying the basis of your calculations for each of the two years to 30 April 1999 and 2000 respectively which will enable you to examine the company's progress during 2000.

**(10 Marks)**

- (b) From the information available to you, including the ratios calculated in part (a), comment upon the company's results for the year to 30 April 2000 under the headings of 'profitability', 'liquidity', 'efficiency' and 'shareholders interests'.

**(12 Marks)**

- (c) State what additional information you would require in order to assess the company's attempts to stimulate sales during the year to 30 April 2000.

**(3 Marks)**

**Total: 25 Marks**

## Question 2

The balance sheets of Broadbent Ltd. for the years ended 31 March 1999 and 31 March 2000 are presented below:

	<u>31/3/2000</u>	<u>31/3/99</u>
	£000's	£000's
Tangible fixed assets, cost (Note 1)	442	426
Accumulated depreciation (Note 1)	<u>136</u>	<u>118</u>
	306	308
Financial fixed assets	<u>125</u>	<u>100</u>
	431	408
Current assets		
Stocks	298	262
Debtors	209	196
Investments (Note 2)	5	36
Cash at bank	<u>4</u>	<u>44</u>
	<u>516</u>	<u>538</u>
Creditors due within one year		
Trade Creditors	219	182
Accruals	5	8
Taxation	38	40
Proposed dividend	<u>15</u>	<u>17</u>
	<u>277</u>	<u>247</u>
Net current assets	<u>239</u>	<u>291</u>
Total assets less current liabilities	670	699
Long-term loan	<u>60</u>	<u>200</u>
	<u>610</u>	<u>499</u>
Share capital	300	250
Share premium account	60	25
Profit and loss account	<u>250</u>	<u>224</u>
	<u>610</u>	<u>499</u>

Question 2 Continued overleaf..

## **Question 2 Continued..**

The profit and loss account for the year ended 31 March 2000 is as follows:

	£000's
Sales	1,208
Cost of sales (including depreciation of £42,000)	<u>723</u>
Gross Profit	485
Distribution costs	(182)
Administrative expenses	<u>(219)</u>
	84
Dividends received	8
Interest received	2
Interest paid	<u>( 15)</u>
Profit before taxation	79
Taxation	<u>38</u>
Profit after taxation	41
Proposed dividend	<u>15</u>
Retained profit	26

Note 1: Tangible fixed assets with a cost of £48,000 were sold during the year at their net book value.

Note 2: Current asset investments consist of short-term government securities held to provide a ready source of cash for the company.

### **You are required to:**

- (a) prepare a cash flow statement for Broadbent Ltd. for the year ended 31 March 2000, including the reconciliations relating to operating profit and net debt;  
(20 Marks)
- (b) explain briefly the value of a cash flow statement to a shareholder  
(5 Marks)

**Total: 25 Marks**

### **Question 3**

The following Trial Balance was extracted from the books of Pendlebury Ltd. as at 31st May, 1999.

	£000	£000
Bad debts	10	
Sales		3,302
Purchases	1,980	
Rent, rates and light	140	
Ordinary shares of £2 each		1,000
Profit and loss account 1 June 1998		680
Land (cost £900,000)	900	
Plant & machinery (cost £1,000,000)	520	
Vehicles (cost £600,000)	238	
Stocks as at 1 June 1998	500	
Debtors	500	
Creditors		420
Printing	184	
Bad debts provision		20
Interim dividend paid	50	
Bank overdraft		60
Wages and salaries	300	
Administration & distribution expenses	160	
	<u>5,482</u>	<u>5,482</u>

The following additional information is available:

1. Depreciation is to be provided on fixed assets on hand at 31st May 1999 at the following rates:

Plant and machinery	10% of reduced balance
Vehicles	20% of cost
2. The stock at 31st May, 1999 was recorded at cost at £510,000.
3. The rent of the company's showrooms has been paid up to 31st August, 1999. The annual rent of the showrooms is £24,000 per annum.

**Question 3 Continued overleaf..**

**Question 3 Continued..**

4. In October 1998 the company paid rates of £12,000 for the half year to 31st January, 1999. No further rates have been paid since then.
5. Bad debts of £16,000 are to be written off and the bad debts provision is to be adjusted to 5% of debtors.
6. In June 1998 the company sold an old vehicle for £2,000. This vehicle had originally cost £30,000 and had a book value at the date of sale of £6,000. The only entry made in the books in respect of this transaction was to debit the bank account and credit the sales account, with £2,000.
7. Provision is to be made for a final dividend of 5p per share.
8. The Bank Overdraft was taken out on 30th May, 1999

**You are required to prepare:**

- (a) the Trading and Profit and Loss Account of Pendlebury Ltd. for the year ended 31st May, 1999, and
- (b) the Balance Sheet as at that date.

**Total: 25 Marks**

## SECTION B

(Answer TWO questions from this Section)

### Question 4:

Hopwood Ltd. has recently been formed to manufacture and sell a new product. The shareholders have contributed capital of £260,000, of which £180,000 has already been invested in fixed assets which will have an annual depreciation charge of £30,000 starting on 1 July 2000 when the factory commences production. £18,000 has been paid on 15 May as the first six months' rent on the factory, under a lease which requires payments of £18,000 every half year. The company now wishes to prepare a cash budget for the coming year, by quarter, to enable it to discuss with the bank any further need for finance. The following plans and forecasts have been assembled:

- |                       | Projected sales<br>(Units) |
|-----------------------|----------------------------|
| July-September 2000   | 1,000                      |
| October-December 2000 | 3,000                      |
| January-March 2001    | 5,000                      |
| April-June 2001       | 6,000                      |
| July-September 2001   | 6,000                      |
| October-December 2001 | 6,000                      |
- (1)
- (2) The sales price per unit will be fixed at £30. Half of the sales proceeds will be collected in the quarter in which sales take place; the remainder, less 5% of total sales expected to be uncollectible, will be received in the following quarter.
- (3) The company's policy will be to manufacture sufficient units in the quarter July-September 2000 to meet sales in that and the following quarter, and thereafter to hold, at the end of each quarter, stocks of finished goods equal to forecast sales for the following quarter.
- (4) The company has already ordered 20,000 kilograms of raw material (the product requires 3 kilograms of raw material per unit) at a cost of £4 per kilogram. These will be paid for in July. After this initial purchase, the company's policy will be to buy further raw material so that stocks at the end of each quarter at least equal the amount forecast to be required for production in the following quarter. Payments for raw material will be made in the quarter following purchase.
- (5) Direct wages will amount to £6 per unit of production and variable overheads will be £2 per unit of production. Both will be paid in the quarter in which production takes place.

**Question 4 Continued overleaf..**



**Question 4 Continued..**

- (6) Total fixed overheads are forecast at £168,000 per annum. Apart from depreciation on fixed assets and rent, it is expected that fixed overheads will be payable in equal monthly instalments.

**You are required to:**

- (a) prepare a cash budget for Hopwood Ltd. for the year ended 30<sup>th</sup> June 2001, by quarter;  
(16 marks)
- (b) state, with reasons, whether you think it is sufficient to produce a cash budget by quarter or whether you feel that shorter periods should be used;  
(4 marks)
- (c) prepare a brief response to a manager of the new company who argues that budgeting is pointless for them because they are so uncertain about what will happen.  
(5 marks)

**Total: 25 Marks**

### Question 5

Dickens Ltd uses a job costing system. There are three production departments: cutting, assembly and finishing. Currently a single plantwide overhead rate based on direct labour cost is being used to allocate overheads to products.

You are given the following budgeted data for the month of April 2000:

	Cutting	Assembly	Finishing
Manufacturing overhead	£42,000	£192,000	£228,000
Direct labour hours	5,000	8,000	12,000
Direct wage rate	£9 per hour	£7 per hour	£6 per hour
Machine hours	80,000	40,000	30,000

You are also given the following actual data for April 2000:

	Cutting	Assembly	Finishing
Manufacturing overhead	£44,600	£203,400	£221,600
Direct labour hours	5,500	7,800	12,600
Direct wage rate	<i>direct wage rates remained the same as budgeted</i>		
Machine hours	76,400	42,100	31,300

The actual material costs, and labour and machine hours used in producing a particular order (Job QEE2) during April 2000 were as follows:

Job QEE2	Cutting	Assembly	Finishing
Direct material cost	£4,500	£6,100	£8,200
Direct labour hours	2,000	2,500	3,000
Machine hours	20,000	3,000	2,000

#### You are required to:

- Calculate the total manufacturing cost of job number QEE2, using the plantwide overhead rate actually employed by the company during April 2000.  
(5 marks)
- Calculate the cost of job QEE2 using departmental overhead rates, based on direct labour hours in the cutting department and machine hours in the assembly and finishing departments.  
(8 marks)
- Calculate the under- or over-applied overhead which would have arisen in each department for April 2000 based on the departmental overhead rates calculated in part b).  
(6 marks)
- Discuss the advantages of using departmental overhead rates rather than a single plantwide rate for costing products.  
(6 marks)

**Total: 25 Marks**

### Question 6

The production manager and management accountant at Lapsley Valley Products Company Ltd. are reviewing the production plan for the coming year. The company has produced the following four products – Pak A, E, I and O for the past year. A recently recruited junior management accountant has prepared the following statement as the basis for selecting products which should be produced during the coming year in view of an impending difficulty in acquiring raw materials.

	<b>Pak A</b>	<b>Pak E</b>	<b>Pak I</b>	<b>Pak O</b>
	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
<b>Selling Price per unit</b>	200	280	100	350
<b>Cost per unit</b>				
Materials	40	60	30	120
Labour	60	60	15	60
Variable overheads	18	44	15	48
Fixed overheads	<u>60</u>	<u>60</u>	<u>15</u>	<u>60</u>
<b>Profit per unit</b>	<b>22</b>	<b>56</b>	<b>25</b>	<b>62</b>
<b>Ranking</b>	4	2	3	1
<b>Estimated maximum demand next year in units</b>	300	700	480	400

Materials are all of one type and cost £5 per kilogram. Lapsley Valley Products Ltd. can acquire only 14,400 kilograms of this material next year due to a world-wide shortage. All other resources can be obtained in the desired quantities. Fixed overheads are charged at 100% of labour cost, based on estimated annual demand, under the company's costing system.

**You are required to:**

- Calculate the profit expected for the coming year using the accountant's calculations. Comment on the accountant's statement above as a basis for product selection. **(5 Marks)**
- Prepare an improved production plan for the coming year and calculate the profit expected from your suggested plan. **(15 Marks)**
- Indicate how confident you are that your suggestion is optimal and comment on any difficulties the company might experience with your optimal production plan. **(5 Marks)**

**Total: 25 Marks**