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OLLSCOIL NA hEIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS, 2002 (SPECIAL)

BACHELOR OF COMMERCE - FIRST YEAR
BACHELOR OF COMMERCE WITH LANGUAGE - FIRST YEAR
BACHELOR OF INFORMATION TECHNOLOGY - FIRST YEAR
BACHELOR OF CORPORATE LAW - FIRST YEAR

ACCOUNTING AY 102

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Mr F. Conaty
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INSTRUCTIONS TO CANDIDATES:

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

Separate answer books are not required

All questions carry equal marks

Time allowed: THREE HOURS

SECTION A
(Answer TWO questions from this Section)

Question 1:

The profit and loss account of Tennyson Ltd for the year ended 31 December 2001, the balance sheets for the years ended 31 December 2000 and 2001, and details from some notes to the financial statements are set out below:

		€000s
Sales		2,100
Cost of sales (note 1)		1,230
Gross profit		870
Distribution costs	275	
Administrative expenses	456	
		731
Operating profit		139
Interest received		5
Interest paid		(60)
Profit before taxation		84
Corporation tax		25
Profit for the financial year		59
Dividends		40
Retained profit for the year		19

31 December 2000 €000s	31 December 2000 €000s		31 December 2001 €000s	31 December 2001 €000s
772		Fixed assets (note 2)		843
		Current assets		
	472	Stocks	436	
	364	Debtors	392	
	78	Investments (note 3)	24	
	24	Cash at bank	48	
	938		900	
		Creditors due within one year		
	-	Bank overdraft	33	
	312	Trade creditors	340	
	30	Corporation tax	25	
	35	Proposed dividends	30	
	377		428	
561		Net current assets		472
1,333				1,315
500		Long-term loan		360
833				955
300		Share capital		350
-		Share premium account		18
-		Revaluation reserve		35
533		Profit and loss account		552
833				955

Note1: Cost of sales has been reduced by deduction of a profit of €13,000 on the disposal of fixed assets.

Note 2:

	Cost/valuation	Accumulated depreciation	Net
Balance at 31 December 2000	€990,000	€218,000	€772,000
Surplus on revaluation	35,000		35,000
Additions	168,000		168,000
Disposals	(48,000)	(21,000)	(27,000)
Charge for the year		105,000	(105,000)
Balance at 31 December 2001	€1,145,000	€302,000	€843,000

Note 3: The current asset investments are held by the company as a readily disposable store of value.

You are required to:

(a) prepare a cash flow statement for Tennyson Ltd for the year ended 31 December 2001, in accordance with the requirements of *FRS 1 Cash flow statements*;

(19 marks)

(b) explain what aspects of the company's activity can best be understood through the use of a company's cash flow statement.

(6 marks)

Total: 25 Marks

Question 2:

The summarised balance sheets of Arnold Ltd for each of the last three financial years are as follows:

	31/12/1999 €000s	31/12/2000 €000s	31/12/2001 €000s
Fixed assets (note 1)			
Land and buildings	438	452	724
Plant and machinery	456	518	602
	894	970	1,326
Current assets			
Stocks	372	414	438
Debtors	308	360	410
Cash at bank	144	42	2
	824	816	850
Creditors due within one year			
Trade creditors	330	342	354
Taxation	34	44	32
Proposed dividends	36	46	46
	400	432	432
Net current assets	424	384	418
	1,318	1,354	1,744
Long-term loans	374	374	294
	944	980	1,450
Share capital	400	400	500
Share premium account	100	100	200
Revaluation reserve			250
Profit and loss account	444	480	500
	944	980	1,450

The profit and loss accounts for the two years ended 31 December 2000 and 31 December 2001 are as follows:

	2000 €000s	2001 €000s
Sales	2,512	2,786
Cost of sales	1,578	1,806
Gross profit	934	980
Distribution costs (note 2)	302	366
Administrative expenses	468	472
Interest	38	44
	808	882
Net profit before taxation	126	98
Taxation	44	32
Profit for the year after taxation	82	66
Proposed dividend	46	46
Retained profit for the year	36	20
Profit brought forward	444	480
Profit carried forward	480	500

Note 1: The land and buildings, which had previously been included at cost less accumulated depreciation, were revalued on 1 January 2001. Plant and machinery are included at cost less accumulated depreciation.

Note 2: Distribution costs include €100,000 in respect of a special advertising campaign for the launch of a new product in the last two months of 2001.

You have a friend who bought shares in Arnold Ltd on the basis of the financial statements for the year ended 31 December 2000. He is interested in your views on the performance of the company in 2001 relative to 2000 and on the changes in the financial position during the year.

You are required to prepare a report for the investor, making use of such ratios or other analysis as you consider appropriate.

Total: 25 Marks

Question 3:

Stanley Thomas commenced business as a retailer on 1 October 2001. He kept detailed accounting records, and on 31 December 2001 he extracted the following trial balance from his accounts.

Account	Dr.	Cr.
	€	€
Bank	24,176	
Capital		20,000
Cash	200	
Cleaning	236	
Creditors		9,924
Debtors	2,616	
Discount Allowed	436	
Discounts Received		360
Drawings	2,520	
Equipment	2,320	
Insurance	400	
Purchases	27,924	
Rates	1,440	
Rent	800	
Repairs	2,680	
Sales		38,760
Stationery	224	
Van	2,000	
Wages	1,072	
	€69,044	**€69,044**

No provision has yet been made in the accounts for the following:

1. The cost of stock at 31 December 2001 is estimated at €2,320. However, because of deterioration, it is believed that it will have to be sold for only €2,080.

2. Because of a book-keeping error, the figure for repairs in the trial balance includes €2,000 which was actually spent on purchasing equipment.

3. Depreciation is to be provided as follows:
   Equipment: 5% of cost
   Van: €100

4. Bad debts of €216 are to be written off, and a bad debts provision of 2% of the remaining debtors is to be created.

5. The firm's premises were cleaned by a local contract cleaning firm in December, but the bill of €10 has not yet been paid.

6. The payment for rent is in respect of the period 1 October 2001 to 31 January 2002.

You are required to:

(a) prepare the Profit & Loss Account of Stanley Thomas for the three months to 31 December 2001, and a Balance Sheet at that date.

(21 marks)

(b) explain why accountants calculate depreciation on fixed assets, given the difficulty of estimating their useful economic lives.

(4 marks)

Total: 25 Marks

SECTION B
(Answer TWO questions from this Section)

Question 4:

Michael Strait is planning to begin operations in a manufacturing business on 1 July 2002; he has collected the following information about his new business:

(1) He intends to borrow €700,000 to add to the amount of €400,000 of his own capital which he will deposit in his business bank account. Machinery will be purchased immediately for €480,000.

(2) The volume of sales of the single product to be manufactured is expected to be as follows:

July	200 units	October	850 units
August	600 units	November	600 units
September	750 units		

(3) The product will require a single raw material which is expected to cost €80 per kilogram. Each unit of production will require 3 kilograms of the raw material. Because raw material is readily available, stocks at each month end will be planned to be sufficient for just half of the following month's expected production. All stocks of raw materials will be paid for in the month after purchase.

(4) Each unit of production will require 5 labour hours at a cost of €15 per hour.

(5) The monthly cost of fixed overheads (i.e. rent, rates, telephone, light, heat, salaries, administration expenses, selling expenses etc.) is expected to be €96,000 - this includes depreciation of €4,000.

(6) The sale price will be €450 per unit and cash from sales will be received 60% in the month after sale and 40% in the subsequent month.

(7) Stocks of finished units at the end of each month will be equal to the planned sales for the following month.

You are required to:

a) prepare a cash budget for Michael Strait showing expected cash receipts and cash payments for the months of July, August and September and for the three month period in total (you will need to prepare a production budget and a raw materials purchases budget as part of the overall process);

(20 marks)

b) describe the principal benefits, both financial and non-financial, of preparing an annual budget.

(5 marks)
Total: 25 Marks

Question 5:

Whitman Ltd carries on its manufacturing operation in two departments - Machining and Assembly. All work is carried out to customer order. You are given the following budgeted data for 2001:

	Machining	Assembly	Total
Budgeted overheads	€360,000	€540,000	€900,000
Budgeted direct labour hours	6,000	43,200	49,200
Budgeted machine hours	32,000	9,000	41,000

All direct labour is paid €12 per hour. Whitman Ltd currently uses a predetermined overhead rate based on direct labour hours calculated on a plantwide basis, for applying overhead to individual jobs processed.

You are given the following actual data for job number M92:

	Machining	Assembly	Total
Direct labour hours	80	480	560
Machine hours	460	160	620
Direct material costs			€8,400

During 2001, actual direct labour hours worked were 5,850 in the machining department and 45,500 in the assembly department. Actual machine hours worked in 2001 were 32,400 and 8,500 in machining and assembly respectively. Actual overheads incurred for the year in the machining department were €372,000 and in the assembly department were €566,000.

You are required to:

a) calculate the total manufacturing cost of job number M92, using the plantwide overhead rate actually employed by the company during 2001;

(6 marks)

b) recalculate the total manufacturing cost of job number M92 using departmental overhead rates. The departmental rates should be calculated on whatever basis you consider to be most appropriate and you should briefly justify your choice;

(8 marks)

c) using the rates obtained in part (b), calculate the under- or over-applied overhead for 2001 by department and in total, stating how that balance should be treated in the accounts;

(6 marks)

d) outline the main purposes of a job costing system.

(5 marks)

Total: 25 Marks

Question 6:

Connemara Products Ltd. manufactures a range of very high quality items for sale to tourists. The following predictions of sales, costs and profit for the coming financial year have been prepared by the accountant:

	€	€
Sales		**275,000**
Variable costs:		
Wages	64,000	
Raw materials	47,000	
Variable manufacturing overheads	24,500	
Variable selling & distribution overheads	29,500	
		(165,000)
Contribution		**€110,000**
Fixed costs:		
Fixed manufacturing overheads	39,500	
Fixed administrative overheads	21,500	
Fixed selling & distribution overheads	20,000	
		(81,000)
Net profit:		**€29,000**

You are required to:

(a) calculate, assuming that the average selling price per item is €45, how many items must be sold for the company to
  (i) break-even;
  (ii) earn a profit of €27,000; **(12 marks)**

(b) given that the company is facing uncertainty over the cost of raw materials in the forthcoming financial year, calculate the percentage increase in cost of raw materials per unit of output which would result in the company not making any profit in the forthcoming financial year; **(3 marks)**

(c) given that the company is considering some long-term changes to the way it carries out its manufacturing, administrative and distribution activities, the overall effect of which would be a 15% increase in the total fixed costs per annum, but with a decrease in variable costs per unit (variable costs would then amount to 56% of selling price), calculate at what levels of output would these changes be profitable for the company; **(5 marks)**

(d) give one example of <u>each</u> of the five types of overhead cost listed in the accountant's calculations. **(5 marks)**

Total: 25 Marks