

THE UNIVERSITY OF LONDON

B.Sc. and B. Eng Examination 2005/6

**For internal students of Imperial College of Science Technology and
Medicine**

This paper also forms part of the examination for the Associateship.

ACCOUNTING

BS0822

Wednesday 11th January 2006, 10.00 – 12.00

CLOSED BOOK

Answer all 10 questions in Section A

Answer two questions from section B

Section A carries 30 marks

Each question in section B carries 35 marks

Show all your working

SECTION A

Answer all 10 questions using the multiple choice answer sheet provided
(Each question in this section carries 3% of the marks for the Examination)

Please note:

There are two parts to each of the examination papers. The multiple choice part (part A) of the past paper has NOT been included due to Business School examination regulations. Only the essay part (part B) is shown.

SECTION B

Answer TWO questions from this section
(each question carries 35% of the marks of the Examination)

Question 11

The Matrix Hotel opened for business on 1 May 2005. Below is its trial balance before adjustment on 31 May.

Matrix Hotel
Trial Balance
31 May 2005

	Debit	Credit
	-----	-----
Cash	£2,500	
Prepaid Insurance	1,800	
Office Supplies	2,600	
Land	15,000	
Lodge	70,000	
Furniture	16,800	
Accounts Payable		£4,700
Unearned Rent Revenue		4,500
Interest Payable		350
Mortgage Payable		35,000
Common Share Capital		60,000
Rent Revenue		9,000
Salaries Expense	3,000	
Utilities Expense	1,000	
Advertising Expense	500	
Interest Expense	350	
	-----	-----
	£113,550	£113,550
	=====	=====

Additional information:

- (i) Insurance expires at the rate of £300 per month.
- (ii) An inventory of office supplies shows £1,200 of unused supplies on 31 May.
- (iii) Annual depreciation is £3,600 on the lodge and £3,000 on furniture.

- (iv) Unearned rent of £1,500 has been earned.
- (v) Salaries of £500 are accrued and unpaid at 31 May.

Required:

- (a) Prepare Matrix Hotel's Profit & Loss account for May 2005.
- (b) Prepare Matrix Hotel's Balance Sheet at 31 May 2005.

(Total = 35 Marks)

Question 12

Pacific-Dunlop supplies tires to major automotive companies. It has two tire plants in North America - Detroit and Los Angeles. The quarterly bonus plan for each plant manager has three components:

1. Add 2% of operating income.
2. Add \$10,000 if on-time delivery performance to the 10 major customers is 98% or better. If on-time performance is below 98%, add nothing.
3. Deduct 50% of cost of sales returns from 10 major customers.

These three components represent profitability performance, on-time delivery performance, and product quality performance.

Quarterly data for 2005 pertaining to the Detroit and Los Angeles plants follow:

	Jan-Mar	Apr-June	July-Sept	Oct-Dec
DETROIT				
Operating income	\$800,000	\$850,000	\$700,000	\$900,000
On-time delivery	98.4%	98.6%	97.1%	97.9%
Cost of sales returns	\$18,000	\$26,000	\$10,000	\$25,000
LOS ANGELES				
Operating income	\$1,600,000	\$1,500,000	\$1,800,00	\$1,900,000
On-time delivery	95.6%	97.1%	97.9%	98.4%
Cost of sales returns	\$35,000	\$34,000	\$28,000	\$22,000

Required:

- (i) Compute the bonus paid each quarter of 2005 to the plant manager of the Detroit plant and to the plant manager of the Los Angeles plant.

(20 Marks)

- (ii) Evaluate the three components of the bonus plan as measures of profitability, on-time delivery and product quality.

(15 Marks)

(Total = 35 Marks)

Question 13

The Scarborough Corporation in Australia manufactures and sells two products, Thingone and Thingtwo. In July 2005 Scarborough's budget department gathered the following data for 2006:

2006 Projected Sales:

Product	Units	Price
Thingone	60,000	\$165
Thingtwo	40,000	\$250

2006 Inventories, in Units

Product	Expected Jan 1, 2006	Target Dec 31, 2006
Thingone	20,000	25,000
Thingtwo	8,000	9,000

To produce one unit of Thingone and Thingtwo, the following direct materials are used:

Direct material	Unit	Amount Used per unit	
		Thingone	Thingtwo
A	lb	4	5
B	lb	2	3
C	each	0	1

Projected data for 2006 with respect to direct materials are as follows:

Direct Material	Anticipated Purchase Price	Expected Inventories January 1, 2006	Target Inventories December 31 2006
A	\$12	32,000lb	36,000lb
B	\$5	29,000lb	32,000lb
C	\$3	6,000 units	7,000 units

Projected direct manufacturing labour requirements and rates for 2006 are as follows:

Product	Hours per unit	Rate per unit
Thingone	2	\$12
Thingtwo	3	\$16

Manufacturing overhead is allocated at the rate of \$20 per direct manufacturing labour hour.

Required:

On the basis of the above projections and budget requirements for Thingone and Thingtwo, prepare the following budgets for 2006:

- Sales budget (in dollars)
- Production budget (in units) and direct materials purchases budget (in quantities)
- Direct materials purchases budget and direct manufacturing budget (in dollars)

(Total = 35 Marks)