UNIVERSITY OF LONDON

Undergraduate BEST Programme Examinations 2005

B.Sc., B.Eng. and M.Eng. Examinations 2005

For internal Students of Imperial College of Science Technology and Medicine.

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

ACCOUNTING

(BS0822)

Tuesday 3rd May 2005, 14:30 - 16:30

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.)

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 2 questions out of 3.)

Question 11

Comparative statement data for Campo Company and Gabelli Company, two competitors, are presented here. All balance sheet data are as of 31st December 2004, and 31st December 2003.

	Campo Company		Gabelli Company	
	2004	2003	2004	2003
Net sales	£450,000		£920,000	
Cost of goods sold	260,000		620,000	
Operating expenses	140,000		52,000	
Interest expense	3,000		10,000	
Income tax expense	11,000		65,000	
Current assets	180,000	£110,000	700,000	£550,000
Plant assets (net)	705,000	470,000	800,000	750,000
Current liabilities	60,000	52,000	250,000	275,000
Long-term liabilities	215,000	68,000	200,000	160,000

Additional information:

(i) Cash provided by operations for 2004 was £20,000 for Campo and £185,000 for Gabelli.

(ii) The average number of shares outstanding was 200,000 for Campo and 400,000 for Gabelli.

(iii) The stock price at 31st December 2004 was £2.50 for Campo and £7 for Gabelli.

Required:

(a) Compute the following for both companies:

(i) net income

(ii) earnings per share

(iii) price-earnings ratio
(iv) working capital
(v) current ratio
(vi) current cash debt coverage ratio
(vii) debt to total assets ratio

(b) Based on your answers in (a), comment on the relative profitability, liquidity, and solvency of the two companies.

(c) Critically evaluate the usefulness of financial ratio analysis for investment purposes.

(Total = 35 Marks)

Question 12

X Limited commenced business on 1 March making one product only, the standard cost of which is as follows:

Direct labour	£5
Direct material	8
Variable production overhead	2
Fixed production overhead	5
Standard production cost	20

The fixed production overhead figure has been calculated on the basis of a budgeted normal output of 36,000 units per annum.

You are to assume that there were no expenditure or efficiency variances and that all the budgeted fixed expenses are incurred evenly over the year. March and April are to be taken as equal period months.

Selling, distribution and administration expenses are:

Fixed	£120,000 per annum
Variable	15% of the sales value

The selling price per unit is £35 and the number of units produced and sold was:

	March units	April units
Production	2,000	3,200
Sales	1,500	3,000

Required:

(a) Prepare profit statements for each of the months of March and April using
   (i) marginal costing, and
   (ii) absorption costing.

(b) Present a reconciliation of the profit or loss figure given in your answers to (a)(i) and (a)(ii) accompanied by a brief explanation.

(c) Comment briefly on which costing principle, i.e. marginal or absorption, should be used for what purposes(s) and why, referring to any statutory or other mandatory constraints.

(Total = 35 Marks)

Question 13

A division of Ding Ltd manufacture three products, Alpha, Beta and Gamma, the standard costs of which are as follows:

	Alpha	Beta	Gamma
Materials	£21	£14	£21
Labour:			
Machinists (@ £1.50 per hour)	6	9	3
Assemblers (@ £1.00 per hour)	3	4	2
Overheads	9	13	5

Overheads have been included using the following overhead recovery rates:

	£ per Machine hr	£ per Assembly hr
Variable overheads	0.50	0.50
Fixed overheads	1.00	0.50

These were calculated on the basis that production would be in line with the full estimated demand given below.

The marketing director has estimated that demand for the forthcoming year will be:

Alpha	6,000	units at a selling price of £49.5 each
Beta	10,000	units at a selling price of £53.0 each
Gamma	8,000	units at a selling price of £42.0 each

But the production director has pointed out that machine capacity is currently 88,000 hours per annum, although this will increase to 120,000 hours per annum when the new plant (already on order) is delivered. However, this will not be during the year for which the budget is being prepared. The production director, anticipating the problem, has located a general engineering firm who are equipped to undertake work of appropriate quality and have quoted the following prices for production of the company's products on a sub-contracting basis:

Alpha	£39.5 per unit
Beta	£42.8 per unit
Gamma	£32.0 per unit

(Continued on next page)

Required:

A report to management giving your recommendations upon the alternatives available and covering the following separate matters:

(a) The optimal production plan and profitability achievable on the assumption that no purchases are available from outside the company. State any reservations you may have about your proposed plan.

(b) The best use of the opportunity to buy from outside, highlighting the effect on profits of this alternative plus any non-financial factors that need to be considered before adopting this policy.

(Total = 35 Marks)