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UNIVERSITY OF LONDON

**279 0019 ZB
996 D019 ZB**

BSc degrees and Diplomas for Graduates in Economics, Management, Finance and the Social Sciences, the Diploma in Economics and Access Route for Students in the External Programme

Elements of Accounting and Finance

Tuesday, 9 May 2006: 2.30 to 5.30 pm

Candidates should answer **FOUR** of the following **SIX** questions: **QUESTION 1** of Section A, **TWO** questions from Section B and **ONE** question from Section C. All questions carry equal marks.

Workings should be submitted for all questions requiring calculations. Any necessary assumptions introduced in answering a question are to be stated.

Extracts from compound interest tables are given at the end of the paper.

8 column accounting paper is provided. If used, it must be fastened securely inside the answer book.

A hand held calculator may be used when answering questions on this paper but it must not be pre-programmed or able to display graphics, text or algebraic equations. The make and type of machine must be stated clearly on the front cover of the answer book.

PLEASE TURN OVER

SECTION A

Answer **both** parts of question 1.

1. Fernandow plc is a wholesaler of toys for children. The following trial balance was extracted from its accounting records as at 31 March 2006:

	£000s	£000s
Buildings: cost	1,600	
provision for depreciation at 1 April 2005		160
Cash at bank	370	
Debentures 8%, 2014		2,400
Directors' salaries	100	
Distribution costs	940	
Dividend paid	200	
Electricity	95	
Fixed asset disposal account		9
Freehold land at valuation	3,500	
General expenses	420	
Motor vehicles: cost	1,811	
provision for depreciation at 1 April 2005		500
Prepaid motor insurance at 1 April 2005	8	
Purchases	6,800	
Retained profits at 1 April 2005		756
Returns outwards		320
Revaluation reserve		700
Sales		10,499
Share capital (50p ordinary shares)		1,000
Staff wages	390	
Stock of toys at cost, 1 April 2005	290	
Trade creditors		890
Trade debtors	710	
	<u>17,234</u>	<u>17,234</u>

The following additional information is available:

- (1) The stock of toys was counted at the close of business on 31 March 2006 and valued at its selling value of £400,000. The normal gross margin on sales is 40%. It has subsequently been found that this sum includes toys which would normally sell for £30,000 but, as they are damaged, they will have to be sold at half their normal selling price.
- (2) The invoice for electricity for March 2006 had not been received or paid by that date. It was estimated to be £8,000.

(question continues on next page)

Extracts from compound interest tables

n	(1 + i)ⁿ	vⁿ	s_n	a_n
i = 0.03				
1	1.03	.97	1.00	.97
2	1.06	.94	2.03	1.91
3	1.09	.92	3.09	2.83
4	1.13	.89	4.18	3.72
5	1.16	.86	5.31	4.58
i = 0.04				
1	1.04	.96	1.00	.96
2	1.08	.92	2.04	1.89
3	1.12	.89	3.12	2.78
4	1.17	.85	4.25	3.63
5	1.22	.82	5.42	4.45
i = 0.05				
1	1.05	.95	1.00	.95
2	1.10	.91	2.05	1.86
3	1.16	.86	3.15	2.72
4	1.22	.82	4.31	3.55
5	1.28	.78	5.53	4.33
i = 0.10				
1	1.10	.91	1.00	.91
2	1.21	.83	2.10	1.74
3	1.33	.75	3.31	2.49
4	1.46	.68	4.64	3.17
5	1.61	.62	6.11	3.79
i = 0.12				
1	1.12	.89	1.00	.89
2	1.25	.80	2.12	1.69
3	1.40	.71	3.37	2.40
4	1.57	.64	4.78	3.04
5	1.76	.57	6.35	3.60
i = 0.15				
1	1.15	.87	1.00	.87
2	1.32	.76	2.15	1.63
3	1.52	.66	3.47	2.28
4	1.75	.57	4.99	2.86
5	2.01	.50	6.74	3.35
i = 0.20				
1	1.20	.83	1.00	.83
2	1.44	.69	2.20	1.53
3	1.73	.58	3.64	2.11
4	2.07	.48	5.37	2.59
5	2.49	.40	7.44	2.99

END OF PAPER

6. The management of Digital Dynamos plc is considering an investment in new equipment in order to enter the market for a new type of personal entertainment gadget. £1.5 million has already been incurred on a feasibility study which must be paid for very soon. The following estimates have been prepared for the five year life of the project:

Equipment:
 initial cost £20.0 million
 scrap value at the end of year 5 £4.0 million
 Cost of capital 15% per year

	Year 1	Estimated annual increase
	£ millions	%
Sales revenue	13.0	4
Materials	4.0	4
Labour and other direct costs	3.0	3
Depreciation of equipment	3.2	0
Overheads allocated to the project	1.0	5

The estimated annual increases in costs and revenues allow for increased activity as well as rising prices.

Assume that all cash flows arise at the end of the year concerned except for the initial cost of the equipment which is incurred at the start of the project.

Required:

- Using the above information advise the management of Digital Dynamos plc whether or not it should go ahead with the project. Include all relevant calculations in the form of a table and explain your answer carefully. **(12 marks)**
- Give calculations to show whether it would be more beneficial to lease the equipment for five equal annual payments of £4.4 million, the first being due immediately. **(5 marks)**
- Outline four additional matters that should be considered before deciding whether to lease or buy the equipment. **(2 marks)**
- Briefly explain why discounted cash flow is appropriate when evaluating long-term projects. **(6 marks)**

All calculations should be expressed in £millions and rounded to two decimal places.

- Distribution costs for the year include motor insurance cover for the year to 30 June 2006 which cost £36,000. The premium for the year was paid on 1 July 2005.
- During the year a delivery van which had cost £21,000, and on which depreciation of £10,000 had been provided at 1 April 2005, was sold for £9,000.

The proceeds were credited to the fixed asset disposal account appearing in the trial balance. No depreciation is charged on fixed assets in the year of sale.
- Depreciation is to be provided on fixed assets at the following annual rates:

Buildings	2% per year on cost
Motor vehicles	25% per year on a decreasing-balance basis.
- One year's interest on the 8% debentures was due for payment on 31 March 2006 but was paid in the following week.
- Corporation tax on the profit of the year is to be provided and the provisional estimate is £260,000.

Required:

- Prepare a profit and loss account for the directors of Fernandow plc, in good style, for the year ended 31 March 2006. **(17 marks)**
- Give the formula for calculating the interest cover ratio and calculate it for Fernandow plc. Explain what the ratio means and whether a high or low ratio would be better for the shareholders. **(8 marks)**

SECTION B

Answer **two** questions from this section.

2. Answer **four** of the following six parts. Each answer is not to exceed 200 words in length (in addition to any necessary calculations and workings). *Excessive length will be penalised.*

- (a) King Pharmaceuticals plc has just spent £50 million on developing a new medicine that is expected to yield substantial profits over the next four years. Use this example to help explain the distinction between the terms 'relevance' and 'reliability' when preparing financial statements for shareholders. Why are 'relevance' and 'reliability' seen to be important qualitative characteristics of accounting information?
- (b) At the end of the financial year, the theoretical stock of Sellas Ltd according to its perpetual inventory records cost a total of £156,250 whereas the annual accounts show a figure of £127,922 for closing stock following a physical stock count.
- Give **three** possible reasons why the two figures are different. Briefly explain how any problems you have identified might be avoided in the future.
- (c) Xanthe Ltd is preparing its annual accounts for the year ended 30 April 2006 and, at that date, its trade debtors totalled £162,000. Included in this total is £7,200 owed by Cain who was made bankrupt in October 2005 and is expected to pay only 10% of his debt. In November 2005, a former customer Abel Ltd paid £600 in respect of a debt written off in 2004; the cash received was credited to a suspense account.

At 1 May 2005 there was a provision for bad and doubtful debts of £7,200. This is to be adjusted to 5% of the closing figure for trade debtors as at 30 April 2006.

Give calculations to show the net figure for

- i. bad and doubtful debts to be included in the profit and loss account for the year ended 30 April 2006, and
 - ii. trade debtors to be shown in the year end balance sheet. Where would you expect to find this in the balance sheet? Why?
- (d) What use is the figure for net cash flow from operating activities when assessing the financial performance of a company? Give **four** reasons why the net cash flow from operating activities might be different from the company's operating profit (ie its net profit before interest and tax).

(question continues on next page)

Required:

- (a) Prepare a cash budget for the five months to the end of September showing receipts, payments and the closing balance for each month separately. **(10 marks)**
- (b) Prepare a budgeted balance sheet as at the end of September clearly showing the amount of the net working capital. **(7 marks)**
- (c) Calculate the budgeted current ratio as at the end of September. **(1 mark)**
- (d) Comment on the budgeted working capital situation at the end of September and on the bank manager's requirements. **(7 marks)**

SECTION C

Answer **one** question from this section.

5. Tian Ltd will be seeking a bank loan in October for expansion purposes. The company's bank manager has indicated that, at the end of September, he would wish to find that the company has net working capital of at least £50,000 and a current ratio above 1.4.

The company's summarised balance sheet at the end of April is as follows:

	<u>£000s</u>	
Buildings and equipment	220	
Stock	108	
Trade debtors	<u>50</u>	
	378	
Less:		
Trade creditors	48	
Bank overdraft	<u>62</u>	<u>110</u>
Share capital and reserves		<u>268</u>

The following information is available:

- (1) Monthly sales forecasts are:

£90,000 in May
£72,000 in June
£66,000 in July
£102,000 in August and subsequent months.

- (2) 50% of sales revenue is always received in the month of sale and 50% in the following month.
- (3) It is the company's policy to hold at the end of each month sufficient stock to sustain sales for the following two months.
- (4) Sales price is calculated using a mark-up on cost of 50%.
- (5) All purchases of stock are paid for in the month following purchase.
- (6) Monthly operating costs are expected to be £27,000 including depreciation of £3,000. Operating costs are paid for in the month to which they relate.

(question continues on next page)

- (e) Great plc bought 80% of the ordinary share capital of Tiny Ltd for £5.2 million when Tiny's summarised balance sheet as at 30 April 2006 was as follows:

	<u>£ million</u>	
Total assets less current liabilities	<u>6.9</u>	
Ordinary share capital	0.8	
Share premium account	1.3	
Retained profit	2.8	
6% Debentures 2009	<u>2.0</u>	
	6.9	

The fair value of Tiny's total assets less current liabilities on acquisition was agreed to be £7.0 million.

- i. Calculate the figures that will appear in Great plc's consolidated balance sheet for goodwill on consolidation and minority interest.
- ii. Briefly explain what the term 'minority interest' means.
- (f) Jason wants to sell his business. Distributable cash flow for the year just ended was £35,000 and is expected to grow each year by 4%. Businesses of this type tend to earn a return on investment of 20% per year. Use the perpetuity model to value Jason's business as a going concern. Explain why the value you have calculated is different from the current value of the tangible net assets of £135,000.

3. Yasmin has asked for your advice on whether she should buy shares in Mahal Enterprises plc which has been tipped as a company worth thinking about. You have managed to obtain the following summarised information taken from the company's most recent annual accounts:

	£000s
Profit and loss account	
Turnover	8,463
Cost of goods sold	5,530
Net profit after interest and tax	1,073
Dividends paid and proposed	250
Balance sheet	
Fixed assets	2,990
Stock at cost	416
Trade debtors	468
Cash at bank	234
Trade creditors	1,300
Share capital (50 pence shares)	2,000
Share premium	600
Retained profit	208

The share price of Mahal Enterprises plc is currently 301 pence and has been around this level for the past few months.

The trade association to which Mahal Enterprises plc belongs compiles statistics taken from the annual accounts of its members and from other sources. You have obtained the following recently prepared data which give the industry average for seven statistics as

Gross profit margin	43%
Current ratio	2.4
Quick (liquid) ratio	1.6
Trade debtors' turnover	11.6
Stock turnover	11.5
Trade creditors' turnover	9.2
Price/earnings ratio	14

Required:

- (a) Calculate the above seven statistics for Mahal Enterprises plc giving the formula in each case. Use the statistics to comment on the company's recent performance. Any assumptions must be stated. **(18 marks)**
- (b) What further information would you advise Yasmin to seek before deciding whether or not to buy shares in Mahal Enterprises plc? Explain why this information is needed. **(7 marks)**

4. (a) The following figures appear in the recent draft balance sheet of Nassim and Hashim plc:

	£ millions
Issued share capital (£1 shares)	10
Share premium account	42
Retained profit	26
7% loan repayable in 2018	70
Total assets less current liabilities	<u>148</u>

The company's shares are currently quoted at £10 per share.

The directors are concerned at the high gearing of the company which has led to criticism in the financial press. They have agreed to implement the following three suggestions, the objectives being to deal with the criticism and to improve the financial structure of the company:

- (1) The company's freehold land cost £25 million six years ago and has recently been revalued by Lee and Low, chartered surveyors, at £38 million. The revised value is to be reported in the balance sheet.
- (2) Then a 4 for 1 bonus share issue is to be made.
- (3) After (2) above has been carried out, a 2 for 5 rights issue is to be made at the price of £1.95 per share; it is expected to be fully taken up.

Required:

- i. Give calculations to show the effect on the company's balance sheet if each of the three changes given above is made. Explain briefly whether each satisfies the stated objectives and is a sensible suggestion. **(9 marks)**
 - ii. Redraft the balance sheet extract after incorporating the three changes and calculate the company's gearing ratio before and after the changes. **(7 marks)**
- (b) Nassim and Hashim plc has some purchased brands as assets on its balance sheet but its growth has mostly been through developing its own brands which are now currently worth about £180 million. A director has suggested that these assets should also be reported on the balance sheet and that this would deal with criticism of the company's gearing. Explain to the director whether or not these brands could be reported in the balance sheet, giving reasons. **(9 marks)**