Diploma in Financial Management

PAPER DA1, INCORPORATING SUBJECT AREAS
- **INTERPRETATION OF FINANCIAL STATEMENTS**
- **PERFORMANCE MANAGEMENT**

MONDAY 2 DECEMBER 2002

QUESTION PAPER

Time allowed **3 hours**

This paper is divided into three sections

Section A	ALL 20 questions are compulsory and MUST be answered
Section B and Section C	THREE questions in total to be answered. Candidates MUST answer ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

Module A

Section A – ALL 20 questions are compulsory and MUST be attempted
Each question within this section is worth 2 marks.
Please use the Candidate Registration Sheet provided to indicate your chosen answer to each multiple choice question.

1 Which of the following assumptions best explains the nature of the 'going concern concept' in respect of the preparation of financial statements?

A all assets of an entity will realise their book value,

B an entity will continue to be profitable,

C an entity will continue in operational existence,

D an entity is solvent.

2 Limbus plc's balance sheet at 30 September 2002 included the following items:

	£m
Fixed Assets (net book value)	18
Current Assets	10
Current Liabilities	4
Long term loans	8

The Share Capital and Reserves as at 1 October 2001 were £12m. During the year ended 30 September 2002 the Company has issued £1m of new shares at par. It has not revalued any of its fixed assets. It has paid an interim dividend of £1m and proposed a final dividend of £2m.

What was the profit attributable to the shareholders of Limbus plc for the year ended 30 September 2002?

A £7m

B £6m

C £3m

D 0

3 Stroma plc has an accounting year-end of 30 September. Stroma plc purchased a machine on 1 April 1999 for £200,000. The machine was estimated to have a useful life of eight years and was to be depreciated at 25% per annum using the reducing balance method. On 31 January 2002 the machine was sold for £90,000. The company charges a full year's depreciation in the years of purchase and disposal.

What is the profit or loss arising on the disposal of the machine to be included in the Profit and Loss Account for the year ended 30 September 2002?

A Loss £22,500

B Loss £10,000

C Profit £5,625

D Profit £26,719

4 In adjusting net operating profits to net operating cash flows for the purpose of a Cash Flow Statement, which of the following combinations are the correct adjustments?

	Added to Operating Profits	Deducted from Operating Profits
A	Decrease in stock	Profit on disposal of assets
B	Increase in creditors	Depreciation for the year
C	Depreciation for the year	Increase in creditors
D	Increase in debtors	Loss on disposal of assets

5 Orbit plc acquired 80% of the ordinary share capital of Cone Limited on 1 October 2001 for £9m. The net assets in the balance sheet of Cone Ltd at 30 September 2002 were £6m. Cone had made a profit for the year ended 30 September 2002 of £2m.

For the purposes of the acquisition the Directors of Orbit plc considered the fair value of the assets of Cone Ltd to be equal to book value except for one piece of freehold land which was considered to have a fair value £1m higher than book value. Orbit plc amortises goodwill over five years.

In the group's Balance Sheet of Orbit plc, at 30 September 2002, what is the net book value of the goodwill arising on the acquisition of Cone Ltd?

A £3·2m

B £4·0m

C £4·64m

D £5·0m

6 **Which of the following is *not* an example of a transaction which could be used to create 'off-balance sheet finance'?**

A Sale and repurchase arrangements

B Factoring of debts

C Warranty provisions

D Consignment stocks

7 **If a company's share price increases which of the following combinations reflects the effect on its dividend yield and Price Earnings (P/E) ratios?**

	Dividend Yield	P/E ratio
A	Increases	Increases
B	Decreases	Increases
C	Increases	Decreases
D	Decreases	Decreases

The following information relates to questions 8, 9 and 10.

The following financial statements apply to two companies Cornea Ltd and Retina Ltd for the year ended 30 September 2002.

Balance Sheets as at 30 September 2002

	Cornea Ltd		Retina Ltd	
	£M	£M	£M	£M
Tangible Fixed Assets		288		410
Current Assets				
Stock	140		160	
Debtors	90		83	
	230		243	
Creditors: amounts falling due within one year				
Creditors	82		150	
Taxation	3		85	
Bank overdraft	20		17	
Proposed dividends	16		32	
	121		284	
Net current assets (liabilities)		109		(41)
Total assets less current liabilities		397		369
8% Loan		(105)		–
		292		369
Share capital and reserves				
Called up share capital		165		255
Retained profits		127		114
		292		369

Profit and Loss Accounts for year ended 30 September 2002

	Cornea Ltd	Retina Ltd
	£M	£M
Sales	800	640
Cost of Goods Sold	(650)	(478)
Gross Profit	150	162
Operating expenses	(87)	(105)
Operating profit	63	57
Taxation	(20)	(17)
Profit after Tax	43	40
Proposed Dividends	(16)	(32)
	27	8

8 Which of the following best explains the relative financial performance of the two companies?

A Retina Ltd has better operating margins and a more efficient usage of fixed assets

B Retina Ltd has poorer operating margins and a less efficient usage of fixed assets

C Retina Ltd has better operating margins but a less efficient usage of fixed assets

D Retina Ltd has poorer operating margins but a more efficient usage of fixed assets

9 Which of the following combinations gives the correct Returns on Equity (Shareholders Funds) for Cornea Ltd and Retina Ltd for the year ended 30 September 2002?

	Return on Equity (%)	
	Cornea Ltd	Retina Ltd
A	14·73	10·84
B	26·06	2·17
C	26·06	15·69
D	14·73	15·45

10 Which combination of the following three statements in respect of the working capital management of the two companies is correct?

1. Cornea Ltd has a higher quick ratio.
2. Cornea Ltd has a higher rate of stock turnover.
3. Cornea Ltd on average pays creditors more quickly.

A 1, 2 and 3

B 1 and 2 only

C 1 and 3 only

D 2 and 3 only

11 Leicester Limited is planning to offer customers a new service involving specialist internet searches. The charge to customers will be £4 per search. Leicester will use students whose labour-related cost will total £10 per hour. Searches are budgeted to take 15 minutes on average. Leicester will incur additional annual fixed overheads of £100,000 to operate this new service, plus additional computer and line rental costs of £50,000 per annum.

What is the annual breakeven number of searches for Leicester Limited?

A 25,000

B 37,500

C 66,667

D 100,000

12 Nottingham Limited is planning to use three staff members for a special project, but the company needs to calculate whether the project will be profitable. The following information is available. The full employment costs for the three staff involved in the project, for the life of the project, would be £15,600. The cost of hiring agency staff to cover the work they would normally undertake would be £21,400. Another alternative is for three regular staff to cover the work of the staff involved in the project, and to hire new additional staff to cover for these three regular staff at a cost of £18,000.

What is the cost of staff that should be included in the calculation of the profitability of the project?

A £5,800

B £15,600

C £18,000

D £21,400

13 'xxx' describes the relationship between utilisation of resources (inputs) and the output produced by those resources. Improving 'xxx' means getting more output from each unit of input, or getting the same amount of output with fewer resources.

In this definition what does 'xxx' refer to?

A Economy

B Efficiency

C Effectiveness

D Value-for-money

The following information relates to questions 14 and 15.

Derby Limited budgets for 2,000 units of Z12 per month. Fixed overheads are allocated using standard labour hours. Z12 requires three hours of direct labour, and the fixed overhead absorption rate is £6 per standard labour hour. 2,200 units were produced in November 2002, and the actual fixed overhead costs incurred were £37,200.

14 What is the correct fixed overhead spending (expenditure) variance for November?

A £1,200 adverse

B £1,200 favourable

C £2,400 favourable

D £3,600 favourable

15 What is the correct fixed overhead volume variance for November?

A £1,200 adverse

B £2,400 adverse

C £2,400 favourable

D £3,600 favourable

16 In the Balanced Scorecard for Ashby plc, one of the goals has been stated as 'continuing to introduce successful new products to the market'.

Which of the following measures is most appropriate for that goal?

A Percentage of sales from new customers

B Percentage of sales from new products

C Number of new patents registered by Ashby per year

D Lead time for new products

17 Grantham Limited is preparing its sales budget for 2003. The sales manager estimates that sales will be 120,000 units if the Summer is rainy, and 80,000 units if the Summer is dry. The probability of a dry Summer is 0·4.

What is the expected value of sales for 2003?

A 96,000 units

B 100,000 units

C 104,000 units

D 120,000 units

18 Melton plc has many divisions which it evaluates using Return on Investment (ROI) and Residual Income (RI) measures. The Mowbray division has net assets of £24m at 30 September 2002. In the year to 30 September 2002 it earned profit before interest and tax of £3·6m. The appropriate cost of capital for the Mowbray division is 12%. During the year to 30 September 2002 it paid interest of £0·6m.

What is the correct combination of ROI and RI for the year to 30 September 2002?

	ROI	RI
A	12½%	£0·12m
B	12½%	£0·72m
C	15%	£0·72m
D	15%	£3·0m

19 This is the philosophy of continually seeking ways to improve operations. It involves identifying benchmarks of excellent practice and instilling a sense of employee ownership of the process.

Which of the following terms is best suited to the definition above?

A Flexible manufacturing systems

B Just-in-time production

C Kaizen

D Supply chain management

20 Division A supplies other divisions within the company with component parts. There are other suppliers in the market supplying virtually identical products with known prices, and Division A also supplies third-party companies.

From the viewpoint of the company as a whole, what is the optimal basis for the transfer price for components sold by Division A to other divisions within the company?

A Full cost plus a profit margin

B Marginal cost

C Market price

D Market price less marketing costs

(40 marks)

Section B – Candidates MUST attempt ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

1 The Directors of Singh Ltd, having identified an opportunity in the market, launched a business to trade in a specialised piece of kitchen equipment. Their first action was to buy all the available stock from their three suppliers as they expected prices to rise.

The details of these purchases in the order in which they took place were:

– 1,000 units at £10 each
– 1,500 units at £11 each
– 500 units at £9 each

Immediately following the last purchases, the purchase price rose to £12 each and remained at that level beyond the end of the financial year.

Sales then commenced and by the year-end Singh Ltd had sold 1,000 units for cash at £15 each and 1,100 units on credit to reliable customers at £16 each.

Required:

(a) Calculate the gross profit figures based on the above data using the following methods:

- **First In First Out (FIFO)**
- **Last In First Out (LIFO)**
- **Weighted Average Cost**
- **Replacement Cost** (8 marks)

(b) Explain the principles applied in each calculation and give the advantages and disadvantages of each. (12 marks)

(20 marks)

2 Tucker plc disclosed the following reserves in its published financial statements at 31 December 2000:

Share Premium	Revaluation Reserve	Profit and Loss Account
£'000	£'000	£'000
440	720	817

During 2001 the following occurred:

1. Tucker plc issued 100,000 additional 10 pence ordinary shares at 65 pence each, fully paid, and 200,000 8% £1 preference shares at £1·20 each, fully paid.
2. Tucker plc revalued its freehold properties from a previous valuation of £1m to £1·2m. Before this revaluation it sold an unused warehouse property for £140,000. This warehouse had previously been revalued from its purchase cost of £60,000 to £100,000. No depreciation is provided on freehold properties.
3. Tucker plc made profits after tax of £308,000 including the surplus on disposal of the warehouse property. Final dividends proposed for the year were 2 pence per ordinary share together with a full year's dividend on the new preference shares. There were no interim dividends.
4. Tucker plc made a 5 for 1 bonus issue of shares on its existing 1 million (including the additional shares in 1 above) ordinary shares of 10 pence each. These new shares ranked for dividends declared for 2001.

Required:

(a) **Explain the general nature of reserves and distinguish between statutory and non-statutory reserves in the published accounts of a public limited company.** (8 marks)

(b) **Prepare a table of reserves for Tucker plc which shows the reserves to be included in their published accounts for the year ended 31 December 2001.** (12 marks)

(20 marks)

3 (a) **Outline the meaning of the phrase 'Value For Money' and explain how the concepts underpinning it may be used to evaluate organisational performance.** (12 marks)

(b) **Evaluate the following four measures which have been suggested by a working party as published performance indicators of a publicly funded and operated fire-fighting and rescue service:**

- **Annual cost of the service**
- **Cost per emergency call-out**
- **Average response time to arrive at incident**
- **Fire deaths per thousand head of population.** (8 marks)

(20 marks)

Section C – Candidates must attempt ONE question from Section B, ONE question from Section C and ONE further question from either Section B or Section C.

4 Marshall Limited is an engineering company with many large departments that each make a separate product. One Department makes 'Stringles'. The standard cost for one Stringle is shown below along with the operating statement for the department that makes Stringles for the six months to 31 March 2002.

Marshall budgets for production of 5,000 Stringles per month.

Standard cost for one Stringle

	£
MATERIALS – 20 kg at £2 per kg	40
LABOUR – 3 hours at £11 per hour	33
VARIABLE OVERHEADS – 3 hours at £5 per hour	15
FIXED OVERHEADS – 3 hours at £8 per hour	24
TOTAL STANDARD COST	112

OPERATING STATEMENTS FOR 6 MONTHS ENDING 31 MARCH 2002

MONTH	1	2	3	4	5	6	Total
Production per month – units	5,000	5,200	5,400	4,800	4,700	4,500	29,600
	£	£	£	£	£	£	£
FLEXIBLE BUDGET COSTS	560,000	582,400	604,800	537,600	526,400	504,000	3,315,200
Less variances:							
MATERIALS							
– PRICE	5,150F	3,090F	1,100F	–2,040U	–5,700U	–2,700U	–1,100U
EFFICIENCY	–6,000U	2,000F	–4,000U	–12,000U	–2,000U	0	–22,000U
LABOUR-PRICE	26,100F	25,725F	27,331F	18,600F	17,400F	15,515F	130,671F
EFFICIENCY	5,500F	9,900F	12,100F	–12,100U	–4,400U	–11,000U	0
VARIABLE OVERHEADS –							
SPENDING	–3,500U	–3,500U	–2,500U	–4,500U	500F	2,500F	–11,000U
EFFICIENCY	2,500F	4,500F	5,500F	–5,500U	–2,000U	–5,000U	0
FIXED OVERHEADS –							
SPENDING	–3,000U	–5,000U	–5,000U	–15,000U	5,000F	5,000F	–18,000U
VOLUME	0	4,800F	9,600F	–4,800U	–7,200U	–12,000U	–9,600U
ACTUAL COSTS	533,250	540,885	560,669	574,940	524,800	511,685	3,246,229

Note: 'U' = unfavourable variance; 'F' = favourable variance.

Required:

(a) **Prepare a financial statement summarising the overall performance of the Stringle department for the six months to 31 March 2002.** (6 marks)

(b) **Write a report to the Operations Director of Marshall Limited commenting on the performance of the Stringle Department for the six months to 31 March 2002. Suggest possible causes for the features you comment on and what further information would be needed.** (14 marks)

(20 marks)

5 The Alfred Company supplies specialist office stationery to regular customers. The directors are concerned that, although all products appear to make a satisfactory gross profit, not all orders are profitable. Currently all overheads are charged equally to each order, based on budgeted volumes. Prices are based on this figure plus the actual cost of items ordered. An analysis of overhead expenses has shown that certain costs vary greatly between orders. The directors have asked for a comparison of typical orders using the current method of allocating overheads and using a simple activity-based costing system.

The following results have been obtained from the overhead analysis.

	£000	Cost driver
Invoice costs	320	Number of lines on invoice – note 1
Packing costs	215	Size of package – note 2
Delivery costs	125	Distance delivered – note 3
Other costs	280	Volume of orders – note 4
Total overheads	940	

Notes

The overhead analysis has revealed the following information.

1. There are 16,000 invoice lines per year.
2. Packaging costs have been categorised into large packages that cost £15 and small packages that cost £9.
3. Couriers charge for delivery based on size of package and distance to destination, as shown in the following table.

	Less than 10 miles	11–50 miles	More than 50 miles
Small	£8	£20	£50
Large	£15	£35	£75

4. There are 4,000 orders per year.

Details of two typical orders are given below:

	Order A	Order B
Lines on invoice	2	8
Size	small	large
Delivery distance	9 miles	150 miles

Required:

(a) Calculate the costs for Order A and Order B using:

(i) the current volume-based allocation system;

(ii) the simple activity-based costing system. (10 marks)

(b) Recommend to the directors of The Alfred Company changes to their current pricing policy. (5 marks)

(c) Comment on the strengths and weaknesses of using activity-based costing data for pricing decisions, using the case of The Alfred Company as an example. (5 marks)

(20 marks)

6 Cadco Limited (Cadco) is an engineering design company, employing around 200 staff. Its clients provide outline specifications and Cadco produces detailed designs. Much of its work is from about twenty regular clients but it is constantly seeking new business, including attempting to attract clients from its main competitors. For many years Cadco has evaluated its performance in terms of annual profit and return on sales. In recent years there has been increasing interest in non-financial performance measures. However the finance director has warned that not focusing on profitability will lead to the firm's eventual demise.

The new managing director has suggested that a balanced scorecard might offer a means to reconcile financial and non-financial appraisal.

Required:

Write a report to the Board of Directors of Cadco that deals with the following issues.

(a) The importance of non-financial methods of performance evaluation, and problems that might arise in using such measures. (6 marks)

(b) The main features of a balanced scorecard as described by Kaplan and Norton. Comment on particular benefits and problems that might apply to Cadco. (8 marks)

(c) Suggest, with reasons, one key measure for each of the main aspects of a balanced scorecard for Cadco. (6 marks)

(20 marks)

End of Question Paper