Diploma in Financial Management

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

MONDAY 1 DECEMBER 2003

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 twenty questions in this section are compulsory and MUST be attempted
Each question in this section is worth 2 marks.
Please use the Candidate Registration Sheet provided to indicate your chosen answer to each multiple choice question.

1 At the end of the financial year, a number of cheques which Keway Ltd had issued to suppliers had not been presented for payment at the bank. As the bank account is overdrawn, the accountant decided to treat these cheques as if they had not been issued.

Which one of the following correctly describes the effect of this treatment on working capital and long term liabilities?

	Working capital	Long term liabilities
A	no change	no change
B	increased	decreased
C	decreased	increased
D	decreased	no change

2 In the year to 30 September 2003, Wexam plc reported a retained profit of £4·8m after paying preference dividends of £200,000 and dividends of £800,000 to the holders of the 4m ordinary shares in issue at the year end. On 1 April 2003 the company had made a bonus issue of one share for every three held.

What figure should be reported as basic earnings per share as defined in FRS 14?

A 120p
B 140p
C 145p
D 160p

3 **Which of the following represents the correct treatment of a revaluation surplus and an impairment loss?**

	Revaluation surplus	Impairment loss
A	Profit and loss account	Profit and loss account
B	Statement of total recognised gains and losses	Statement of total recognised gains and losses
C	Profit and loss account	Statement of total recognised gains and losses
D	Statement of total recognised gains and losses	Profit and loss account

4 Resol plc owns three properties. On 30 November 2003 the following values relate to the properties:

	Head office	Warehouse	Factory
Net book value	£700,000	£400,000	£1,200,000
Market value	£740,000	£405,000	£1,100,000

The revaluation reserve at 1 December 2002 had a balance of £294,000. This represented surpluses on the properties as follows:

Head office	Warehouse	Factory
£186,000	£68,000	£40,000

What is the balance on the revaluation reserve at 30 November 2003?

A £235,000
B £294,000
C £299,000
D £335,000

5 On its balance sheet at 31 October 2003 Corbus Ltd has reported the following reserves:

	£000
Retained profits	1,800
Revaluation reserve	3,100
Share premium	2,300

What is the maximum amount which the company may legally distribute to shareholders?

A £1,800,000
B £4,900,000
C £5,400,000
D £7,200,000

6 Resdev Ltd has incurred the following expenditure on research and development in the year to 30 November 2003:

Project 175	£2·5m
Project 254	£1·6m
Project 393	£4·8m

Project 175 is a project to investigate the link between vitamin deficiency and emotional wellbeing, with the aim of producing a food additive for use by individuals exhibiting signs of vitamin deficiency.

Project 254 followed a previous research project and was completed during the year after a period of 15 months. It has achieved its aim of reducing the material cost of a new product. Production of the product commenced on 1 September 2003. The first sales are expected in February 2004 and the expected life of the product is four years. The company expects the product to be very profitable.

Project 393 is a research project which is being undertaken with a leading University.

What is the minimum amount which Resdev may charge against profit for the year to 30 November 2003?

A nil
B £4·8m
C £7·3m
D £7·4m

7 A company which depreciates fixed assets on a straight line basis is planning to purchase a machine which has a useful life of five years at a cost of £3,342,000. A lease arrangement has been negotiated on the following terms:

Lease period	4 years
Rentals	£943,000 payable annually in advance
Implicit rate in lease	8·7% per annum

What is the total cost to be recognised in the Profit and Loss Account in the first year of the lease?

A £877,113
B £959,154
C £1,044,213
D £1,126,254

The following information is relevant to questions 8 and 9:

The following information relates to the fixed assets of Carsp plc in the past financial year:

	Buildings	Machinery	Vehicles
	£000	**£000**	**£000**
NBV b/f	1,686	918	207
Additions	200	463*	56
Disposals	nil	(178)	(34)
Depreciation charge	(36)	(296)	(64)
NBV c/f	1,850	907	165
Profit/(Loss) on disposals	nil	13	(7)

* includes £350,000 acquired under finance leases

8 **How much will be charged to the profit and loss account in respect of fixed assets (excluding finance costs)?**

A £376,000
B £390,000
C £402,000
D £416,000

9 **What is the net cash flow which will be reported in the cash flow statement in respect of capital expenditure?**

A £151,000
B £157,000
C £501,000
D £507,000

10 At 30 September 2002 the balance sheet of CBN Ltd included a provision for deferred tax of £128,500. At 30 September 2003 the fixed assets had a net book value of £2,650,000 and a tax written down value of £1,872,000. The tax rate is 20%.

What is the balance on the deferred tax account at 30 September 2003?
(Ignore discounting)

A £27,100
B £128,500
C £155,600
D £778,000

11 Consider the following statements about Just-in-time (JIT) purchasing:
(i) reliable suppliers are a key requirement
(ii) material prices are lower
(iii) responding to changes in demand is easier

Which of the above statements could be considered to be key features of JIT purchasing?

A (i) and (ii) only
B (ii) and (iii) only
C (i) only
D neither (i), (ii) or (iii)

12 Optnet Ltd has recently agreed a line of credit at a rate of 8%. The Financial Director estimates that the company's cost of capital is 11%. The net assets have a book value of £110m. The replacement cost of the net assets is estimated to be £145m.

If the company reports an annual profit of £19·35m, what is the economic value added (EVA®) for the year?

A £3·4m
B £7·25m
C £7·75m
D £10·55m

13 Tom Hopkin is responsible for managing the volume, quality and cost of production within his responsibility centre.

What type of responsibility centre does Tom manage?

A Strategic business unit
B Investment centre
C Profit centre
D Cost centre

14 Consider the following statements regarding the use of market based transfer prices:

(i) the selling profit centre always has an incentive to utilise spare capacity
(ii) the selling profit centre will have no preference between internal and external sales
(iii) the buying profit centre will always buy internally

Which of the above statements is/are correct?

A (i) only
B (ii) only
C (iii) only
D (ii) and (iii)

15 Demdisc manufactures computer equipment. Data extracted from the budget for three months is shown below:

	Month 1	Month 2	Month 3
Total overheads	£442,500	£439,060	
Machine hours	7,500	7,420	7,150

What will be the budgeted total overheads for Month 3?

A £421,850
B £422,463
C £423,083
D £427,450

16 **Which one of the following correctly describes how both variable cost per unit and fixed cost per unit respond to a change in production volume?**

	Variable cost per unit	Fixed cost per unit
A	changes	changes
B	remains constant	changes
C	changes	remains constant
D	remains constant	remains constant

17 Shelale Ltd is preparing a tender for a contract, which will require 1,250kg of material. The material is frequently used by Shelale and the current stock is 2,148kg.

What material cost should be included in the tender?

A historic cost
B sale value
C replacement cost
D net realisable value

The following information regarding Posquade Ltd is relevant to questions 18 and 19:

The company produces a single product
Budgeted sales volume for the forthcoming three month period is 50,000 units
Production capacity is 18,000 units per month
All sales are within the UK
The UK market is stable

per unit	**£**	**£**
Selling price		160
Variable cost	80	
Fixed overheads	33	
Total cost		113
Profit		47

18 What is the breakeven volume for the forthcoming three month period?

A 1,064 units
B 10,313 units
C 20,625 units
D 35,106 units

19 A customer in France has requested a price for an initial order of 3,000 units over the next three months.

Assuming that Posquade Ltd wishes to ensure that short term profit is not reduced if the enquiry becomes an order, what is the minimum price per unit that should be quoted?

A £80
B £113
C £146
D £160

20 Graytun Ltd has a production capacity of 280,000 units per annum. The budgeted sales volume for the next year is 256,000 units, and the break even volume is 167,000 units.

What is the margin of safety ratio?

A 31·79%
B 34·77%
C 53·29%
D 65·23%

(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 On 1 September 2003 Haywain Ltd acquired 40% of the ordinary share capital of Sunflower Ltd by way of an issue of 400,000 £1 ordinary shares. The shares were issued at a premium of 25p per share.

When preparing the year end financial statements, the assistant accountant of Haywain Ltd was unsure how the investment in Sunflower Ltd should be treated. He therefore prepared a separate draft balance sheet at 30 November 2003 for each company, but did not reflect the issue of the shares in the balance sheet of Haywain Ltd. The draft balance sheets are shown below:

	Haywain Ltd	Sunflower Ltd
	£000	£000
Tangible fixed assets	2,135	1,053
Net current assets	725	248
Long term liabilities	(430)	(116)
	2,430	1,185
Ordinary shares of £1 each	1,200	750
Share premium	400	–
Retained profits	830	435
	2,430	1,185

In the year to 30 November 2003, Sunflower Ltd did not pay any dividends and reported a retained profit of £180,000. The directors of Haywain plc estimate that the useful life of any goodwill arising on the acquisition of the shares in Sunflower Ltd is five years.

Required:

(a) Draft an e-mail message to the assistant accountant which:

(i) describes the factors which influence the accounting treatment of such an investment; and (8 marks)

(ii) clarifies the correct accounting treatment of the investment in Sunflower Ltd. (2 marks)

(b) As an attachment to the e-mail, show the consolidated balance sheet as it would appear if the investment in Sunflower Ltd was treated correctly. (10 marks)

(20 marks)

2 You are the Chief Executive of Mauda Ltd. The company's draft financial statements for the year to 31 October 2003 are due to be adopted at a board meeting scheduled for next Thursday. These financial statements report profit after tax of £1,374,586 and total net assets of £11,818,471.

In the last few days, you have become aware of the following:

On 28 November, Mauda's legal representatives received a claim for damages of £250,000. The claim relates to an accident which took place on 3 October 2003. The legal representatives have advised that the company is likely to be liable for the claim. They have advised the company to settle out of court and estimate that an offer of £100,000 will be accepted by the plaintiff.

On 15 November 2003, a fire at one of the company's stores destroyed stock valued at £120,000. This represented 30% of the total stock at that date. The company's insurance policy provides for the first £50,000 of any loss to be borne by the company.

Required:

Draft a memo to the directors of Mauda which:

(a) explains, in general terms, how events which occur after the balance sheet date should be dealt with in order to comply with generally accepted accounting practice (GAAP); (10 marks)

(b) indicates how the two events should be treated; and (6 marks)

(c) calculates the amount of the retained profit for the year and the total net assets which will be reported in the company's financial statements. (4 marks)

(20 marks)

3 Genfab Ltd is a manufacturer of ducting for air conditioning and heating systems. In late 2002 new investors acquired the company and appointed you as Operations Manager. Since it was established the company has concentrated on manufacturing a range of products which are sold to trade outlets. Modest profits have been reported for several years, and in the period immediately before the takeover the company was experiencing liquidity problems. The new investors have stated that they are seeking an immediate improvement in these areas.

One element of the new investors' development plan was to establish a contracts division. It is envisaged that contracts will typically take up to 30 months to complete. The investors believe that the additional sales which can be achieved through their industry contacts will lead to improved profitability.

In order to assess this new market only one contract has been taken on to date, but several others are currently being negotiated. The existing contract commenced in January 2003 and is due to be completed by 30 June 2004. The customer has agreed to pay £400,000 plus agreed variations. As a result of a change in building regulations additional costs (as shown below) have been incurred. The customer has agreed to these costs under the variations clause.

Details of the contract are:

Basic contract value	£400,000
Cost to date	£203,200 (excluding agreed variations)
Agreed additional costs	£29,800
Value of work certified	£260,000 (and invoiced to customer)
Expected costs to complete	£98,300
Expected completion	24 June 2004

The draft accounts for the year to 30 November 2003 have recently been prepared and you are due to discuss these with the investors in the next few days. The accounts indicate that there has been no improvement in profitability or liquidity. On investigation you have noted that all stock has been valued at cost. You are aware that this is not the correct valuation of the partially completed contract, but it will not be possible to amend the accounts prior to your meeting with the investors.

Required:

As preparation for the meeting, draft notes which:

(a) state and explain the basic rule to be applied to valuation of stock as set out in SSAP 9, and discuss why long term contract stock is not valued on this basis; (8 marks)

(b) calculate the value of the contract division's stock in accordance with SSAP 9; and (7 marks)

(c) discuss how measures of profitability and liquidity will be affected by adjusting the accounts so that the contract is valued in accordance with SSAP 9. (5 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 White Ladder Ltd manufactures and sells three products, Sylvim, Bernam and Palio. In recent years the company has undertaken investment to provide greater flexibility in the production process. As production is currently around 95% of capacity and sales have remained stable for a number of years, the production schedule follows the historic sales pattern. Product costings are prepared using absorption costing, and indicate that the profit/sales % for each product is around 35%.

The board has decided to review the company's plans for the next three months with the aim of improving profitability. Profit for the three month period just ended was £214,556.

As Project Manager you have been considering how profitability could be improved. The following data has been obtained:

– 653 machine hours are available in each three month period
– additional machines cannot be installed due to lack of space
– overheads are absorbed on a machine hours basis
– market research suggests that there is unsatisfied market demand for all products, based on current selling prices

Current unit product costings and selling prices are:

	Sylvim	Bernam	Palio
	£	£	£
Direct material	127·00	83·00	95·00
Direct labour	74·00	62·00	83·00
Overheads	158·91	190·69	127·12
Total cost	359·91	335·69	305·12
Selling price	560·00	510·00	480·00
Profit	200·09	174·31	174·88
Profit/Sales %	35·73	34·18	36·43
Production/sales (units)	200	600	400
Machine hours per unit	0·5	0·6	0·4
Production runs (for 3 months)	20	18	8
Number of orders (for 3 months)	24	37	11

Overheads for the forthcoming three months are estimated as follows:

	£
Machine running costs	60,480
Production set up costs	93,890
Order processing costs	42,673
Total	197,043

Required:

(a) Calculate the cost of each product using activity based costing. (7 marks)

(b) Draft a memo to the Operations Director which:

(i) recommends the action the company should take, based on your calculations; (3 marks)

(ii) indicates what other information should be considered before proceeding with your recommendation; and (7 marks)

(iii) briefly explains why activity based costing is more appropriate than absorption costing in this instance. (3 marks)

(20 marks)

5 Domane Ltd manufactures high quality garden furniture. The company has recently upgraded its planning and reporting systems and production processes. Your role is to support the management team to ensure that the maximum benefit is obtained from these upgrades. The production manager Susan Shane has received the first quarterly report of cost variances, which is shown below:

		£000	
Materials	Price	22·6	Fav
	Usage	28·4	Adv
Labour	Rate	9·3	Fav
	Efficiency	10·8	Adv
	Idle time	24·7	Adv
Overhead	Expenditure	37·5	Fav
	Volume	41·3	Adv
Total cost variance		35·8	Adv

Susan has expressed concern that the overall variance is adverse, as she had introduced a number of initiatives to improve profitability:

- just in time production introduced
- number of suppliers of raw materials reduced from 23 to 8
- material specifications reviewed, leading to
  - increase in quality in seven materials
  - reduced specification in 15 materials
- training programme deferred pending agreement with trade union (budgeted cost £40,000)
- direct wage increase less than budgeted (the wage rate may rise in the near future when training is completed)

Susan also referred to an article she read some time ago. She thinks this stated that not all adverse variances need to be investigated.

Required:

In preparation for a meeting with Susan, prepare brief notes which:

(a) identify possible reasons for six of the variances which have been reported; (6 marks)

(b) indicate the four most likely reasons for the adverse variances, in light of the initiatives introduced by Susan; (4 marks)

(c) indicate, and justify, the steps the company should now take to improve profitability; and (6 marks)

(d) explain why the article noted that 'not all adverse variances need to be investigated'. (4 marks)

(20 marks)

6 Culum Ltd produces three products. The company has an established, but static, domestic market for its products. The management team is concerned that the market may have reached maturity with the result that, while demand is expected to remain stable for the foreseeable future, the long term outlook is difficult to predict.

You are a member of a project team which has been asked to consider the options available to the company and report to the management team.

Your team has undertaken market research which confirms the view of domestic demand. In addition, a potential export market has been researched. This has indicated that the level of demand can be influenced by marketing activity. The research has provided the following data with regard to marketing expenditure and potential sales in the export market for the next year:

Annual Demand (units)			Marketing expenditure	probability
Standard	Premium	Deluxe		
1,300	800	600	£60,000	0·55
1,100	600	550	£40,000	0·35
900	500	400	£20,000	0·10

The market research has indicated that customers are likely to be strongly influenced by their perception of the company's commitment to a particular market and consequently the company must decide whether to serve the domestic market or the export market.

Last year's sales in the domestic market were:

Standard	1,200 units
Premium	700 units
Deluxe	500 units

Cost and product data is:

	Standard	Premium	Deluxe
Labour hours per unit	1·8	2·6	3·2
Material cost per unit	£102	£165	£180
Selling price per unit	£400	£700	£900

Labour costs are £50 per labour hour and variable overheads are absorbed on a labour hour basis at a rate of £40 per hour. Fixed costs are £120,000 per annum.

Required:

(a) Calculate the profit which the company can expect from:

(i) continuing to sell in the domestic market; and (5 marks)

(ii) entering the export market. (7 marks)

(b) Draft a brief report to the Managing Director which discusses the options that are available to the company and highlights issues which should be considered before a final decision is made. (8 marks)

(20 marks)

End of Question Paper