

Paper DA1 – Incorporating subject areas:
– Interpretation of Financial Statements
– Performance Management

Diploma in Financial Management

Monday 3 December 2007

Time allowed

Reading and planning: 15 minutes

Writing: 3 hours

This paper is divided into three sections:

Section A ALL 20 questions are compulsory and MUST be attempted

Section B THREE questions in total to be attempted.

and Candidates MUST attempt ONE question from

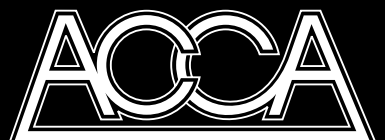
Section C Section B, ONE question from Section C and ONE further question from either Section B or Section C

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.

This question paper must not be removed from the examination hall.

The Association of Chartered Certified Accountants



Module A

Section A – ALL 20 questions are compulsory and MUST be attempted

Please use the Candidate Registration Sheet provided to indicate your chosen answer to each multiple choice question. Each question in this section is worth 2 marks.

1 The accounting equation is often expressed as 'total assets minus total liabilities equals capital'.

Which of the following statements is correct?

- A If total assets increase, there must be a corresponding decrease in total liabilities
- B Capital is reduced when an increase in total assets is less than the increase in total liabilities
- C If total assets decrease, there must be a corresponding decrease in total liabilities
- D Capital is increased when an increase in total assets is less than the increase in total liabilities

2 Consider the following statements:

- (i) items are reported on the balance sheet based on the assumption that the firm will not be required to significantly reduce the scale of its operations
- (ii) non-current assets are always valued at historical cost in the balance sheet

Which of the following is correct?

- | | Statement (i) | Statement (ii) |
|---|-------------------------------------|----------------|
| A | describes the accruals concept | is true |
| B | describes the going concern concept | is true |
| C | describes the accruals concept | is NOT true |
| D | describes the going concern concept | is NOT true |

The following information relates to questions 3 and 4:

Following the preparation of the draft financial statements of Bends Co, it was discovered that the depreciation charge for the year to 31 October 2007 had been calculated at a rate of 20% per annum using the reducing balance method, although the accounting policy is to provide for depreciation on the straight line basis at a rate of 20% per annum. At the balance sheet date the draft accounts reported accumulated depreciation on non-current assets of \$1,475,400 and a net book value of \$2,562,500.

3 **How will the operating profit for the year to 31 October 2007 and the net book value of non-current assets at that date be affected by the correction of the error?**

- | | Operating profit | Net book value |
|---|------------------|----------------|
| A | increased | increased |
| B | decreased | decreased |
| C | increased | decreased |
| D | decreased | increased |

4 **What is the correct depreciation charge for the year to 31 October 2007?**

- A \$1,102,660
- B \$217,420
- C \$512,500
- D \$807,580

- 5 You are preparing the financial statements of Equib Co for the year to 30 November 2007. On 12 October 2007 a breakdown in a customer's machine damaged the entire output of a production run. The customer claimed that the breakdown was due to a fault in a component supplied by Equib, and sought \$750,000 in compensation for the lost production. Equib accepted that the component was faulty and proposed to replace it at a cost of \$45,000. The customer has commenced legal proceedings, and Equib's legal advisor's view is that if the case goes to court, Equib's proposal to replace the component at a cost of \$45,000 is likely to be agreed by the court.

What should be reported in Equib's financial statements for the year to 30 November 2007?

- A a provision for \$45,000
- B a contingent liability of \$45,000
- C a provision for \$750,000
- D a contingent liability of \$750,000

- 6 The income statement of Epis Group reports a retained profit of \$689,424, after the following charges:

	\$
Interest	84,441
Taxation	227,553
Minority interest	47,338
Ordinary dividend (10 cents per share)	65,000

To the nearest cent, what figure should be reported on the income statement for earnings per share?

- A 10 cents
- B 113 cents
- C 116 cents
- D 123 cents

- 7 During the last financial year, Orius Co acquired 44% of the issued share capital of Eerus Co. Under the terms of the acquisition, the finance director of Orius was appointed to the board of directors of Eerus.

Which of the following correctly describes how Orius should account for its interest in Eerus in the consolidated financial statements?

- A as a subsidiary, using consolidation accounting
- B as a subsidiary, using equity accounting
- C as an associate, using consolidation accounting
- D as an associate, using equity accounting

- 8 **Which of the following statements correctly describes the role of a company's external auditor?**

- A to provide reasonable assurance that the financial statements are reliable
- B to ensure that the company has a satisfactory system of internal controls
- C to check that the directors have held regular meetings
- D to ensure that no mistakes have been made in the preparation of the financial statements

- 9 **Which of the following correctly state how research expenditure and development expenditure should be treated?**

Research	Development
A may be capitalised	may be capitalised
B must be written off	may be capitalised
C may be capitalised	must be capitalised
D must be written off	must be capitalised

10 Which of the following bodies has responsibility for encouraging global convergence of accounting standards?

- A The International Financial Reporting Interpretations Committee
- B The International Accounting Standards Committee Foundation
- C The International Accounting Standards Board
- D The International Accounting Standards Committee

11 In the last year, David Jones earned a net profit of \$72,000 on sales of \$726,000. He estimates that his variable costs are 70% of sales. In the next year, he expects that his fixed costs will increase by 5% and his variable costs will be 75% of sales. He wishes to make a net profit of \$81,000.

What sales revenue must he generate in the next year to achieve a profit of \$81,000?

- A \$756,000
- B \$780,300
- C \$907,200
- D \$936,360

The following information relates to questions 12 and 13:

The operating profit for the year to 30 November 2007 of a division of Diviform Co is \$586,900, and the tax charge for the year is \$95,600. The net assets of the division have a book value of \$2,569,800 and an economic value of \$3,180,000. The division's cost of capital is estimated to be 14%.

12 What is the division's residual income?

- A \$46,100
- B \$131,528
- C \$141,700
- D \$227,128

13 What is the division's Economic Value Added®?

- A \$46,100
- B \$131,528
- C \$141,700
- D \$227,128

14 You are preparing a tender for Cencon Co. Following the completion of another contract, Cencon has an inventory of 340 units of a particular material. There are currently no other contracts on which this material will be used. The production manager has estimated that 500 units of the material will be required for the contract. The items held in inventory had cost \$25.70 per unit and they have no salvage value. The replacement cost is \$28 per unit.

What cost should be included in the contract for the 500 units of this material?

- A \$4,480
- B \$12,850
- C \$13,218
- D \$14,000

15 Consider the following statements:

- (i) expected value is of limited use for decisions regarding outcomes which will be repeated often;
- (ii) using expected value in decision-making can lead to the worst possible outcome being ignored;
- (iii) the reliability of expected value calculations is heavily influenced by the accuracy of the probabilities assigned to outcomes.

Which of the statements are correct?

- A** (i), (ii) and (iii)
- B** (i) and (ii) only
- C** (i) and (iii) only
- D** (ii) and (iii) only

16 Consider the following statements about Activity Based Costing (ABC):

- (i) introducing ABC will always reduce costs in the short term;
- (ii) if the cost of a product or service using both ABC and absorption costing is the same, there will be no benefit to be gained from adopting ABC.

Which of the statements is/are correct?

- A** (i) only
- B** (ii) only
- C** both (i) and (ii)
- D** neither (i) nor (ii)

17 In the last four-week operating period, the 11 staff in the customer services section of Gam Co resolved 2,850 customer queries.

The standard time for resolving a query is $\frac{1}{2}$ hour. Staff work a 35 hour week, of which five hours are required for administration and training. The standard cost per query is \$11.38.

What is the labour efficiency variance for the last four-week operating period?

- A** \$2,617.40 Favourable
- B** \$2,617.40 Adverse
- C** \$2,389.80 Favourable
- D** \$2,389.80 Adverse

18 Themens Co uses activity based costing.

The budgeted distribution costs for the next year are:

Transport costs	\$2,631,200
Order processing	\$1,573,000
Total distribution costs	<u>\$4,204,200</u>

It is estimated that in the next year, 325,000 orders will be processed, and that the delivery vehicles will travel 1,495,000 km.

A customer has indicated that 138 orders, each of which will require a journey of 122 km will be placed in the next year.

To the nearest \$, what is the distribution cost for this customer?

- A** \$1,785
- B** \$30,299
- C** \$38,891
- D** \$47,342

19 Consider the following statements:

- (i) materials requirements planning (MRP I) is undertaken in order to remove capacity constraints;
- (ii) Optimised production technology is an improvement on materials requirements planning, as it considers a wider range of resources.

Which of the statements is/are correct?

- A** (i) only
- B** (ii) only
- C** both (i) and (ii)
- D** neither (i) nor (ii)

20 Cardon Co has noted that customer satisfaction has declined in recent months. The lack of motivation among the production employees has been identified as the main cause of this decline. Production is currently organised so that each operative is involved in a specific activity. A decision to revise the production process to a cellular manufacturing approach has been proposed, together with the following initiatives:

- (i) specialised training for production staff to increase their ability to carry out a specific task;
- (ii) the introduction of a bonus scheme based on team output.

Which of the initiatives is/are likely to contribute to the successful adoption of cellular manufacturing?

- A** both (i) and (ii)
- B** neither (i) nor (ii)
- C** (i) only
- D** (ii) only

(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 (a) You are employed in the Client Services department of a firm of investment advisors. One of your clients has been reviewing the financial statements of Julo Co, a company in which he is thinking of investing. He has sent you an e-mail which contains the information shown below and asked you to clarify the significance of the information regarding taxation in the financial statements.

‘I cannot understand why the taxation charge in the income statement is not the same as the liability reported on the balance sheet. Surely the tax charge is based on the profit for the year, and is payable in the following year. This would mean that the liability and the charge should be the same. Also, in the notes to the financial statements, there is a note which says that deferred taxation is calculated on the basis of the ‘full provision’ method. What is deferred taxation, how does it affect the financial statements and why does the note refer to the ‘full provision’ basis? I thought that the full extent of any liability must be reported on the balance sheet?’

Required:

In reply to the client’s enquiry, draft the content of an e-mail which explains:

- (i) **possible reasons for the difference between the taxation charge in the income statement and the tax liability in the balance sheet;** (4 marks)
- (ii) **the reasons for including deferred taxation in the financial statements;** (4 marks)
- (iii) **how the financial statements are affected by the inclusion of deferred taxation.** (3 marks)

(b) Three years ago Julo Co obtained an eight-year term loan for \$3,500,000. One of the conditions of the loan is that the company’s current ratio, as reported in the balance sheet at the end of each year, is to be greater than 1·3 times. As part of your assessment of the company, you have been asked to calculate the forecast value of the current ratio at 31 March 2008. From your discussions with the company, you have obtained the following information:

(i) Average monthly sales and purchases during the year to 31 March 2008 are forecast to be:

Sales	\$1,400,000
Purchases	\$1,125,000.

(ii) Sales will be made at an average margin of 25%.

(iii) It is forecast that at 31 March 2008, the amount owed by customers will be equivalent to 1·6 months of sales, and that the amount owed to creditors will be equivalent to 1·8 months of purchases.

(iv) Based on the forecast profit, the tax liabilities at 31 March 2008 will be:

Current tax	\$290,000
Deferred tax	\$480,000.

(v) The cost of inventory at 31 December 2007 is forecast to be \$825,000.

(vi) At 31 March 2008, other balances are forecast to be:

Bank overdraft	\$120,000
Prepayments	\$96,500
Accrued expenses	\$131,000.

Required:

Calculate Julo’s forecast current ratio at 31 March 2008. (9 marks)

(20 marks)

- 2 Part of your role as a member of the Head Office management team within Suform, a limited liability company involved in road improvement schemes, is to provide support to operational managers. At a recent meeting the commercial manager explained that he is presently negotiating terms on a number of issues relating to a new project. His objective is to maximise the company's return on capital employed, which Suform calculates as follows:

$$\frac{\text{Profit before interest and tax for the year}}{\text{Total assets less current liabilities at the end of the year}}$$

He has asked you to explain the correct accounting treatment of the proposed transactions described below, and how this would affect the return on capital employed. The new contract will commence at the beginning of the next financial year and will last approximately $2\frac{1}{2}$ years.

Purchase of materials

Ten different items of specialised materials will be used on the project. The precise usage of each item is difficult to predict until shortly before it is needed, but it is estimated that over the course of the next financial year, the total value of materials which are expected to be used on this project is \$360,000. No significant seasonal variations are expected.

Suform has identified two possible suppliers who can provide all of the required materials, and they have quoted similar prices, based on the terms outlined below.

The first supplier, Matsup Co, has offered an additional service under which a supply of all of the materials will be delivered to the site for the contract, and held in a secure compound. They will then be drawn down as required, with an invoice issued on the first day of the month following the draw down, subject to a 15 day credit period. The supplier has agreed that, in order to avoid stock-outs, the material in the compound will be maintained at a level equal to two months' usage. Once the contract is completed any unused inventory will be collected by the supplier.

The second supplier is Ture Co who guarantees a delivery lead time of three weeks. The commercial manager has suggested that if this option is selected Suform should maintain inventory levels at the level equal to one month's usage. A credit period of one month will apply to this supplier.

Proposed lease

Suform will require the use of a drilling machine to create a channel in preparation for the laying of a pipeline. On completion of this project, it is likely that the machine will also be used on future projects. If purchased outright, the machine would cost \$700,000, and would be expected to have a useful life of four years. The supplier has suggested two possible leasing arrangements, each of which would be brought into effect at the beginning of the next financial year.

Option A:

This would require monthly payments of \$22,000 during the period of the lease, up to a maximum of four years. The lessor would arrange for the appropriate insurance on the machine, and would undertake regular maintenance and repairs.

Option B:

Under this arrangement, 48 monthly payments of \$16,500 would be made, followed by a final payment of \$50,000. Arranging insurance, maintenance and repairs would be the responsibility of Suform.

Required:

(a) Discuss the issues which must be considered in deciding on the correct accounting treatment of:

- (i) the purchase of materials from both Matsup and Ture;** (6 marks)
- (ii) acquisition of the machine under both leasing option A and leasing option B.** (4 marks)

- (b) The financial director of Suform has estimated that, before including the effect of the proposed leasing arrangements discussed in (a) above, the company's return on capital employed for the next financial year will be 22.6%, based on a capital employed figure at the end of the year of \$9,475,000.

Required:

Calculate the return on capital employed for the next financial year if the machine is acquired under leasing option B.

Note: assume that the finance charge is calculated on the straight-line basis. (10 marks)

(20 marks)

3 You are a member of a team preparing the annual financial statements of Centaur, a limited liability company. The balance sheets at 31 October 2007 and 31 October 2006 are shown below, together with some other relevant information.

You have been asked to provide training for a junior member of staff by demonstrating how a cash flow statement should be prepared and the relevance of the information it contains for the users of financial statements.

Balance sheets as at 31 October:

	2007	2006
	\$000	\$000
Assets		
Non-current assets		
Property, plant and equipment	2,168	1,976
Current assets		
Inventories	157	133
Trade receivables	144	165
Cash at bank	51	14
	<u>352</u>	<u>312</u>
Total assets	<u><u>2,520</u></u>	<u><u>2,288</u></u>
Equity and Liabilities		
Ordinary share capital	900	850
Other reserves – Share premium	48	32
Retained earnings	201	186
Total equity	<u>1,149</u>	<u>1,068</u>
Non-current liabilities		
Long-term borrowings	783	677
Deferred tax	157	145
Total non-current liabilities	<u>940</u>	<u>822</u>
Current liabilities		
Trade and other payables	203	188
Short-term borrowings	197	113
Current tax payable	31	97
Total current liabilities	<u>431</u>	<u>398</u>
Total liabilities	<u>1,371</u>	<u>1,220</u>
Total equity and liabilities	<u><u>2,520</u></u>	<u><u>2,288</u></u>

Other information for the year ended 31 October 2007:

- (i) The depreciation charge for the year was \$302,000.
- (ii) The income statement for the year included a tax charge of \$28,000.
- (iii) During the year there were no disposals of non-current assets.
- (iv) The company has not paid any dividends for the last few years.

Required:

- (a) Explain the relevance of the information in a cash flow statement to the users of financial statements. (6 marks)
- (b) Calculate the following figures for inclusion in the cash flow statement of Centaur for the year to 31 October 2007:
- (i) Net cash flow from operating activities; (7 marks)
 - (ii) Net cash flow from investing activities; (2 marks)
 - (iii) Net cash flow from financing activities; (4 marks)
 - (iv) Movement in cash and cash equivalents. (1 mark)
- (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 You are the administration manager for Orion Consulting. You are preparing the firm's budget for the next year.

You have obtained the following information from the operations manager:

(i) There are two charge-out rates and salary levels for consultants. These are:

	Charge-out rate	Salary
Senior consultant	\$900 per day	\$60,000 per annum
Junior consultant	\$500 per day	\$35,000 per annum

(ii) Salaries for staff other than consultants, are budgeted to be \$160,000 for the year.

(iii) Employment related costs are 10% of total earnings including any bonuses.

(iv) All consultants are full-time employees and are contracted to deliver 180 days of consultancy in the next year.

If Orion requires more than 180 days from a consultant during the next year, the consultant is paid a bonus of 50% of the charge-out rate for the extra days. In the next year, 16 senior consultants and 22 junior consultants will be employed.

(v) Due to previously negotiated contracts, 45 man-days per consultant for all consultants have already been sold.

(vi) On the basis of tenders already submitted, and previous experience, it is estimated that at least 80% of the remaining consultant days will be utilised. There is also a possibility that utilisation could be 120% of the remaining consultant days.

(vii) All consultants are provided with two days formal training each year, at a cost of \$400 per consultant per day.

(viii) Administration expenses for the next year are forecast to be \$830,000.

Required:

(a) Calculate the budgeted profit if the level of utilisation is at 80% of the remaining consultant days.

(7 marks)

(b) Calculate the impact on Orion's profit if the level of utilisation is 120% of the remaining consultant days, based on the following assumptions:

(i) no additional consultants are employed and bonuses are paid to existing consultants; (6 marks)

(ii) additional consultants are employed and no bonuses are paid. (2 marks)

(c) Draft a memo to the managing partner of Orion, which discusses the arguments for and against employing additional consultants, other factors which should be considered and recommends the action that should be taken. (5 marks)

(20 marks)

- 5 Hillside Regional Authority (HRA) is the local government authority for an area which has grown rapidly in the last few years. The centre of the growth is Ballydrumlin, the main town in the area, which for many years had been a major location for textile manufacturers. Over the last twenty years, the decline in textile manufacturing has led to the loss of virtually all employment opportunities in that sector. This has led to a demographic shift so that most of the population of Ballydrumlin travel to other locations in the area for work. This has led to traffic gridlock at peak travel times. However, the roads are almost deserted outside peak travel times.

The HRA Planning Committee has decided that the area has significant potential for growth as a tourist area. This growth will be achieved through the development of 'heritage tours' tracing the history of the local textile industry and establishing the region as an eco-tourism centre. A number of businesses have already been established, providing the basis for growth in both of these initiatives. While a number of tourists currently visit the region, they tend to be on day-trips, with few remaining for overnight stays. An increase in the number of tourists remaining in the region for two days or more has been agreed as the overall goal to be achieved.

The Planning Committee are seeking to encourage development of the region's tourism offering through a range of initiatives. These include development of the transport infrastructure through road improvements, coordination of transport facilities, business development grants and education initiatives. The local vocational college has developed a range of courses in tourism and hospitality, but the number of hotels and guest houses in the region is not sufficient to provide employment for all the students completing their courses. The number of bed-nights currently available is greater than demand, but is well below the level that will be required to meet the targets which have been set for visitor numbers.

A website has been created to showcase the current and planned offerings in the region. To date, this has not received a high volume of hits, as the region is not yet seen as a key tourist destination. To increase awareness, the tourism development manager has been negotiating with the publishers of a number of tourist guides to obtain entries in as many guides as possible. Funds have also been allocated to an advertising campaign.

As a business development executive within HRA, you have been asked to provide advice on how the authority can establish an effective performance measurement system for the tourism initiative.

Required:

- (a) **Explain the purpose of performance measurement and describe how targets, financial measures and non-financial measures, should be used in an effective performance measurement system.** (6 marks)
- (b) **Explain how the use of critical success factors and key performance indicators can assist in overcoming some of the problems which may arise when establishing a performance measurement system.** (6 marks)
- (c) **Explain why non-financial performance measures will be of more significance than financial measures to HRA, and identify appropriate critical success factors and key performance indicators.** (8 marks)

(20 marks)

6 Marydown Co has been in business for a number of years producing telecommunication equipment. The company has been approached by a manufacturer of in-car satellite navigation systems with a view to forming a strategic alliance. The proposal is that one of the components, which is currently used in its end products, would be purchased by the partner for use in one of its products. The partner has suggested that the price for the components should be calculated on a target costing basis. The proposal is to deduct an agreed profit margin and further processing costs from the market price for the navigation system to derive the price for the component.

The managing director has suggested that Marydown should take this opportunity, expand the company's production capacity and change the structure to allow this. He has suggested that two divisions should be formed. One of these would manufacture the component, and the other would manufacture the final products. Some of the output of the component manufacturing division would be transferred to the end-product manufacturing division and some would be sold to the partner. He has noted that if this structure is adopted, it will be necessary to implement an appropriate system of transfer pricing. In addition it is proposed to pay a bonus to divisional managers. This will be calculated as 4% of the amount by which divisional profits exceed 5% of revenue.

Two possible transfer pricing systems, market based and cost based, have been suggested. In the market-based system, internal transfers would be charged at the price paid by the external customer. In the cost-based system, internal transfers would be charged at variable cost plus 70%.

One of the senior managers has questioned the need for what he has referred to as 'another cost heading'. He argues that there will be no benefit to Marydown as the income of one division will be a cost to the other, leading to a neutral effect on the company as a whole.

You have been asked to brief the senior management team on the implications of establishing a transfer pricing system.

You have obtained the following data:

- (i) The selling price of the satellite navigation system will be \$78.
- (ii) The agreed margin will be 25%.
- (iii) The customer's costs of further processing will be \$12.50 per unit.
- (iv) The variable cost of manufacturing is \$26.80 per unit.
- (v) Fixed costs for the component division will be \$2.7 million per annum.
- (vi) The expanded capacity of the component division will be 450,000 machine hours per annum.
- (vii) Each unit requires $2\frac{1}{2}$ hours of machine time.
- (viii) The expected external demand in the first year of operation is 60,000 units.
- (ix) The remaining production capacity will be utilised by internal transfers.

Required:

Prepare briefing notes which:

- (a) **Assess the argument that a transfer pricing system will provide no benefits to Marydown, and discuss the conflicts which the company must resolve if a transfer pricing system is introduced.** (5 marks)
- (b) **Calculate the bonus which would be payable to the manager of the component division in the first year of divisionalisation in each of the proposed transfer pricing systems.** (11 marks)
- (c) **Recommend the basis for calculating a transfer price which is likely to be appropriate for use by Marydown.** (4 marks)

(20 marks)

End of Question Paper