## Diploma in Financial Management

## PAPER DA1, INCORPORATING SUBJECT AREAS

- INTERPRETATION OF FINANCIAL STATEMENTS
- PERFORMANCE MANAGEMENT

MONDAY 4 JUNE 2007

## 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 THREE questions in total to be answered. and Candidates MUST answer 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

This question paper must not be removed from the examination hall


## 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 Following the preparation of the financial statements, the accountant of Tamore Co has discovered that the depreciation charge has been overstated.

When the depreciation charge is corrected, how are the elements of the accounting equation affected?

|  | Assets | Liabilities | Capital |
| :--- | :--- | :--- | :--- |
| A | increased | decreased | unchanged |
| B | decreased | increased | increased |
| C | decreased | unchanged | decreased |
| D | increased | unchanged | increased |

2 During the last financial year, a building owned by Mountain Co has increased in value. The directors wish to recognise this increase.

In which part of the financial statements will the increase be reported?
A The income statement only
B The statement of changes in equity only
C The income statement and the balance sheet only
D The statement of changes in equity and the balance sheet only

3 Josh Franklin buys and sells art and jewellery. At 31 May 2007 he had three items in stock. These were a painting, a necklace and a pair of earrings. He had bought the painting for $\$ 3,500$, thinking that it was an original by Graham Knuttel. He has since discovered that it is a good copy, and it is likely that he would receive no more than $\$ 1,200$ when he sells it. The necklace was bought several years ago for $\$ 900$, while the earrings were bought for $\$ 800$. As the earrings and necklace are of the same style, they can be sold as a set at a combined price of $\$ 3,500$.

At what value should Josh's inventory be reported in his balance sheet at 31 May 2007?
A $\$ 7,000$
B $\$ 5,200$
C $\$ 4,700$
D $\$ 2,900$

4 The income statement of Aeon Co for the year to 30 April 2007 reported a profit for the year of $\$ 1,856,954$. This was after the following charges:

| Depreciation charge | $\$ 165,700$ |
| :--- | :--- |
| Taxation charge | $\$ 572,855$ |
| Interest charge | $\$ 211,744$ |

During the year to 30 April 2007, the net value of inventory and receivables less payables had reduced by \$27,965.
In the company's cash flow statement for the year to 30 April 2007, what figure will be reported as 'Cash generated by operating activities'?

A \$2,050,619
B $\$ 2,262,363$
C $\$ 2,623,474$
D $\$ 2,835,218$

5 Although most limited liability companies are required to arrange for their financial statements to be audited, there is considerable confusion about why an audit is carried out.

Which of the following is/are reasons for carrying out an audit?
(i) to guarantee that the entity is a going concern
(ii) to confirm that the financial statements are fairly presented
(iii) to enable users to make financial decisions

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

6 The directors of Lebcap Co are planning to pay a dividend and wish to decide whether this should be paid in cash or by issuing shares. In particular they are concerned with how these methods of dividend payment will affect the company's capital gearing ratio.

How would the company's capital gearing ratio be affected by the two methods of dividend payment?
Paid in cash Paid in shares
A Increased Decreased
B Increased No change
C No change Increased
D Decreased Increased

7 Reploy Co has reported an operating profit of \$728,654 for the last financial year. The company's income statement also reports an interest charge of $\$ 45,860$, a tax charge of $\$ 158,740$ and an ordinary dividend of $\$ 50,000$. The company's issued ordinary share capital is $\$ 500,000$ in $\$ 1$ shares.

What figure should be reported for earnings per share?
A 94.81 cents
B 104.81 cents
C 136.56 cents
D 145.73 cents

8 In the last financial year, the net profit margin of Grippa Co was $14 \cdot 7 \%$ and asset turnover was $2 \cdot 3$ times.

What was the company's return on capital employed for the financial year?

A $244 \cdot 70 \%$
B $215 \cdot 30 \%$
C $33.81 \%$
D 6.39\%

9 At 31 May 2006 the balance sheet of Rebo Co included a balance of $\$ 75,720$ for deferred tax. At 31 May 2007 the net book value of the company's fixed assets was $\$ 1,728,500$ while their tax written down value was $\$ 1,407,200$. The tax rate at 31 May 2007 is $23 \%$.

What should be reported in the income statement for the year to 31 May 2007 for deferred tax? (You may ignore discounting)

A a charge of $\$ 1,821$
B a credit of $\$ 1,821$
C a charge of $\$ 73,899$
D a credit of $\$ 73,899$

10 In order to be considered useful, financial information should contain certain characteristics, including:
(i) reliability
(ii) understandability
(iii) comparability

Which of the above characteristics of financial information is/are MOST LIKELY to be influenced by the way in which the information is presented?

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

11 Zebed Co uses flexible budgeting to control production costs. The budgeted production volume and budgeted power cost for the last two production periods were:

| Period | Production Volume | Power cost |
| :---: | :---: | :---: |
|  | (units) | $\$$ |
| 1 | 11,260 | 40,845 |
| 2 | 12,580 | 45,135 |

If the budgeted production volume for period 3 is 14,100 units, what is the budgeted energy cost for period 3 ?

A $\$ 50,075$
B $\$ 50,588$
C $\$ 50,852$
D $\$ 51,147$

12 Among the products manufactured by Berbon Co are two products which require material A. Data relating to the products are:

| Product: | Cee | Dee |
| :--- | :---: | :---: |
| Selling price (per unit) | $\$ 35$ | $\$ 47$ |
| Variable costs (per unit) | $\$ 21$ | $\$ 32$ |
| Share of fixed costs (per unit) | $\$ 8$ | $\$ 9$ |
| Profit (per unit) | $\$ 6$ | $\$ 6$ |
| Material A usage (per unit) | 3.5 kgs | 5 kgs |
| Maximum sales demand (units) | 10,000 | 7,000 |

In the next period, the supply of material A will be limited to $35,000 \mathrm{kgs}$.

What volume of each product should be manufactured in order to maximise short term profit?

|  | Cee | Dee |
| :---: | :---: | ---: |
| A | 10,000 | 7,000 |
| B | 5,000 | 3,500 |
| C | nil | 7,000 |
| D | 10,000 | nil |

13 Joosy Co manufactures and sells fruit drinks. The manufacturing division transfers output to the marketing division at a transfer price of $\$ 0.85$ per litre and also sells to other distributors at a price of $\$ 0.92$ per litre. The marketing division incurs conversion and packaging costs of $\$ 0.28$ per litre and achieves a selling price of $\$ 1.33$ per litre.

The cost of manufacture is $\$ 0.47$ per litre and the manufacturing and marketing divisions incur fixed costs of $\$ 3,700$ and $\$ 2,580$ per month respectively.

In May 2007, the manufacturing division made 25,000 litres. Of this, 19,500 litres were transferred and the remainder was sold. The marketing division sold all of the transferred product.

What profits will the two divisions report in May 2007?

|  | Manufacturing | Marketing |
| :---: | :---: | :---: |
| A | $\$ 9,885$ | $\$ 1,320$ |
| B | $\$ 6,185$ | $\$ 6,780$ |
| C | $\$ 6,185$ | $\$ 1,320$ |
| D | $\$ 9,885$ | $\$ 6,780$ |

14 In the month just completed, Duffish Co experienced an unforeseen increase in demand for its products. This meant that additional untrained labour was recruited and a new supplier of a specialised material had to be found at short notice.

What is the MOST LIKELY effect of these decisions on the labour efficiency variance and the materials price variance for the month?

|  | Labour efficiency | Materials price |
| :---: | :---: | :---: |
| A | adverse | adverse |
| B | adverse | favourable |
| C | favourable | favourable |
| D | favourable | adverse |

15 The financial statements of Evaline Co report an operating profit of $\$ 6.38$ million, a tax charge of $\$ 1.46$ million and capital employed of $\$ 23.85$ million.

The finance director estimates that the replacement value of the net assets is $\$ 31.7$ million and that the company's cost of capital is $15 \%$.

What is the Economic Value Added $\mathbb{R}$ of Evaline Co for the period?

A $\$ 165,000$
B $\$ 1,342,500$
C $\$ 1,625,000$
D $\$ 2,802,500$

16 The Northern division of Gemas Co currently earns a return on investment of $15 \cdot 5 \%$, based on capital employed of $\$ 2,680,000$. The divisional management team have decided to implement a project which will require an investment of $\$ 320,000$. The project is expected to generate a profit of $\$ 53,000$ per annum. The Northern division's cost of capital is $13 \%$.

## What will be the residual income of the division after the project is implemented?

A $\$ 67,000$
B $\$ 78,400$
C \$120,000
D \$468,400

17 Which of the following statements about pricing policies is correct?

A a policy of market penetration will lead to a high entry price
B a policy of market skimming will reduce the time taken to complete the introductory phase of the product life cycle
C a policy of market skimming is appropriate for a product which is expected to have a short life cycle
D a policy of market penetration is appropriate for a unique product

18 Yobo Co manufactures a wide range of products. There is considerable variation in the profit per unit sold of each product. The managing director is planning to introduce an incentive scheme for production employees. The objective of the incentive scheme is to improve product quality.

On which of the following should the incentive scheme be based in order to improve product quality?
A Production volume
B Sales revenue
C Level of rework
D Profitability

19 Arbo Co uses the maximin decision rule to select projects. A payoff table for four projects currently under consideration is:

| Project | Payoff if |  |  |
| :--- | :---: | :---: | :---: |
|  | Low | Moderate demand is: | High |
|  | $\$ 000$ | $\$ 000$ | $\$ 000$ |
| 173 | 60 | 75 | 83 |
| 264 | 47 | 69 | 78 |
| 385 | 70 | 81 | 80 |
| 412 | 55 | 63 | 87 |

## Which project should be selected?

A 173
B 264
C 385
D 412

20 Which of the following statements about just-in-time purchasing is/are correct?
(i) Just-in-time purchasing reduces the risk of inventory obsolescence
(ii) Just-in-time purchasing reduces costs in the short term

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

## 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 Newsome, a limited liability company, are in the process of finalising the company's draft financial statements for the year to 30 April 2007. You provide consultancy services to Newsome and the directors have asked you to provide guidance on the nature and application of certain aspects of accounting for non-current assets. In a discussion with you, the managing director referred to 'the need to deal with depreciation or impairment and revaluations'.

You have the following details regarding the company's non-current assets:
Land and buildings
Details of land and buildings at 1 May 2006 are as follows:

| Cost | Accumulated depreciation |
| :---: | :---: |
| $\$$ | $\$$ |
| 800,000 | nil |
| 600,000 | 216,000 |
| 350,000 | 126,000 |
| 820,000 | $\underline{295,200}$ |
| $2,570,000$ | $\underline{637,200}$ |

The company's policy is to depreciate buildings over a period of 25 years on a straight-line basis.
During the year, the directors asked a local surveyor to assess the value of the land and buildings. The values have been reported as:

|  | $\$$ |
| :--- | ---: |
| Land | $1,100,000$ |
| Factory | 620,000 |
| Warehouse | 400,000 |
| Offices | 950,000 |
|  | $3,070,000$ |

The surveyor also estimated that the buildings have a remaining useful economic life of 20 years.

## Machinery

Several years ago the company redesigned the work processes and invested heavily in new machinery. In the last year, technological advances have meant that the existing machines are less efficient than those currently on the market. The machines could be replaced by the more advanced versions at a total cost of $\$ 950,000$. The directors hold the view that, as the company's machines are still providing appropriate production capacity and meeting the standards required by customers, there is no need to replace them. The net book value of the machines is $\$ 1,250,000$, and they are depreciated at a rate of $20 \%$ per annum on a reducing balance basis.

## Required:

(a) Prepare a memo to the managing director which explains the nature and accounting treatment of depreciation, impairment and revaluation of non-current assets.
(b) Calculate the value which should be reported in Newsome's balance sheet at 30 April 2007 in respect of non-current assets.

2 The directors of Paremo Co are assessing the terms of a proposed investment in Invee Co. There are two possible ways in which the investment might be made. These are:

## Option 1

Acquire $70 \%$ of the ordinary shares at a price of $\$ 4 \cdot 10$ per share. If this option is taken, the current board of directors of Invee would resign and be replaced by nominees of Paremo.

## Option 2

Acquire $45 \%$ of the ordinary shares at a cost of $\$ 3.70$ per share, and nominate a director of Paremo to sit on the board of directors of Invee.

In both cases, the investment would be made on 1 August 2007, and the shares acquired will be paid for in cash.
The directors have prepared forecast balance sheets at 31 July 2008 for both companies. These do not reflect the impact of either investment. The directors believe that if the investment is undertaken, the results of Invee will be improved. The forecast balance sheets at 31 July 2008 are shown below:

|  | Paremo | Invee |
| :---: | :---: | :---: |
|  | \$000 | \$000 |
| Non-current assets | 580 | 120 |
| Current assets |  |  |
| Inventory | 75 | 47 |
| Receivables | 120 | 41 |
| Cash | 240 | - |
|  | 435 | 88 |
| Total assets | 1,015 | 208 |
| Equity |  |  |
| Share capital (\$1 shares) | 460 | 80 |
| Retained profit: |  |  |
| At 1 August 2007 | 310 | 76 |
| Year to 31 July 2008 | 60 | 18 |
|  | 830 | 174 |
| Current liabilities |  |  |
| Payables | 185 | 27 |
| Bank overdraft | - | 7 |
|  | 185 | 34 |
| Total liabilities and capital | 1,015 | 208 |

The directors have asked you to advise them as to the correct accounting treatment of the investment in the consolidated balance sheet under both option 1 and option 2.

## Required:

(a) For each of the two options: explain the nature of the investment which would arise; and describe how the investment should be reported in the consolidated balance sheet.
(b) Assuming that the directors decide to acquire 70\% of the shares in Invee (option 1), prepare the forecast consolidated balance sheet of the Paremo Group at 31 July 2008.

3 As a non-executive director of Hike Co, you have been sent the company's draft financial statements for the year to 28 February 2007. Included with the draft is a note which advises you that there are three items which fall under the headings of events after the balance sheet date and provisions and contingent liabilities to be discussed at the next board meeting, with a view to deciding on their treatment in the financial statements.

The draft financial statements report an operating profit of $\$ 2,537,800$ and total shareholders' funds of \$13,685,700.

Details of the three items are:

## Accident in warehouse

On 20 February 2007, there was an accident in the company's warehouse. This led to the destruction of inventory which had cost $\$ 70,000$. The company accountant had dealt with this in the draft financial statements by creating a debtor for the compensation due from the insurance company.

On 22 April 2007, the insurance company wrote to Hike stating that as the accident was a result of the company's failure to implement correct safety procedures in the warehouse the loss was uninsured.

The company accountant has not revised the treatment in the draft financial statements.

## Robbery

The company holds a high volume of cash, and on 1 March, the premises were burgled and $\$ 35,700$ in cash was stolen. The company accountant has included this loss in the financial statements on the basis that the profits for the year to 28 February are better than expected and it is better to set the loss against the good profits, as the 2008 year may not report such good figures.

## Compensation claim

During the year a number of customers complained that products supplied by Hike were defective, and that they had incurred costs to rectify the problem. The customers have formed a pressure group, and have demanded a total of $\$ 320,000$ to be paid as compensation.

The company's investigation indicates that Hike will have to accept liability, and the customers have been offered $\$ 190,000$ to settle the claim. This offer has not been accepted, and court action is likely. Hike's legal advisors have stated that they believe the court settlement will be $\$ 250,000$.

As the dispute is ongoing and the court case is unlikely to take place until 2008, the company accountant has not included any charges in the draft financial statements.

## Required:

In preparation for the board meeting, prepare notes which:
(a) summarise the generally accepted accounting practice for:
(i) events after the balance sheet date; and
(ii) provisions and contingent liabilities.
(b) evaluate whether the three items have been treated correctly in the draft financial statements;
(c) calculate the values which should be reported for operating profit and shareholders' funds.

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 operations director of Karsmart Co. The company operates a chain of retail outlets selling car accessories. Since your appointment five years ago the company has grown and is now considered as the market leader. This is attributed to a number of initiatives based on the 'Beyond Budgeting' model. Within the industry, you are identified as being the key driver of these changes. As a result, you have been asked to make a presentation at a forum for managers in the retail sector.

Your brief is to explain the problems and weaknesses of traditional budgeting, and to outline strategies to overcome these problems. You have also been asked to describe the benefits that can be expected from such a project.

## Required:

In preparation for your presentation, draft brief notes which:
(a) Explain the problems and weaknesses of traditional budgeting;
(b) Identify possible strategies to overcome the problems you have identified, and explain how these can contribute to improved organisational performance;
(c) Describe the benefits that an organisation making the change from traditional budgeting can anticipate if it adopts the strategies you have identified in (b);

5 Bookem Co offers customers an on-line booking service for package holidays, tickets for events, and flights. The projected results for the current year are:

|  | Holidays | Tickets | Flights |
| :--- | :---: | :---: | :---: |
|  | $\$ 000$ | $\$ 000$ | $\$ 000$ |
| Sales revenue | 7,685 | 3,770 | 3,045 |
| Direct costs | $(5,870)$ | $(2,670)$ | $(2,260)$ |
| Share of central costs | $(1,157)$ | $(845)$ | $(767)$ |
| Profit | 658 | 255 | 18 |

The direct costs are made up of the cost of buying the various services from the providers and other costs incurred by Bookem to operate and promote that line of business. With the exception of advertising costs of $\$ 2,972,900$, the direct costs are considered to be variable. The price charged to the customer is calculated by adding a standard mark up to the cost of buying the service from the provider.

The analysis of the advertising costs is:

| Holidays | Tickets | Flights |
| :---: | :---: | :---: |
| $\$ 000$ | $\$ 000$ | $\$ 000$ |
| $1,766.21$ | 773.69 | 433.00 |

The central costs, which are considered to be fixed, are allocated to the lines of business on the basis of the usage of the central computer system, at a rate of $\$ 65$ per processing hour.

The directors are considering whether to undertake a further investment in the booking system. They have received a quote of $\$ 819,000$ for the upgrade, which will have a useful life of three years and will increase processing capacity by $13 \%$. They estimate that the following cost increases will occur in the incoming year:

| Advertising | Holidays | $\$ 160,000$ |
| :--- | :--- | ---: |
|  | Tickets | $\$ 55,000$ |
|  | Flights | $\$ 35,000$ |
| Central costs before system upgrade | $\$ 215,000$ |  |

The directors have asked you to investigate:
(i) the profitability of each line of business, based on the contribution per processing hour;
(ii) the total revenue which must be generated in the incoming year to increase the company's profit by 10\%; and
(iii) whether the booking system upgrade will provide sufficient processing hours to generate the revenue required to achieve the profit target.

For the purposes of your investigation, the directors do not anticipate any change in either:
(i) the proportion of total revenue which is generated by each line of business; or
(ii) the contribution per processing hour for each line of business.

## Required:

(a) Calculate:
(i) the profitability of each line of business, based on the contribution per processing hour;
(ii) the total revenue which Bookem must generate to meet the directors' target of a $10 \%$ increase in profit in the incoming year; and
(iii) whether the upgraded system will provide sufficient processing hours to generate the revenue required to achieve the profit target.
(b) Briefly discuss the limitations of your analysis in (a).

6 John Jackson has been trading for several years, making a limited range of ornamental features for domestic gardens. In that time he has established a reputation with his customers for providing good value for money. He has decided to expand his business by increasing his product range and selling via the internet.

To date, his practice has been to provide the customer with a written quotation in advance. When preparing quotations he calculates the price of his products by absorbing overheads into product cost at a standard rate, based on labour hours. On average each job requires 27 labour hours.

He is a little concerned that his present approach to pricing may be too simplistic for his expanded business, and that he ought to consider the use of activity based costing (ABC).

He has asked you to assist him in investigating whether ABC is appropriate for his business. You have obtained the following information:

His total overheads for the next year will be $\$ 1,810,000$. You have analysed these as follows:

| Machine costs | $\$ 840,000$ |
| :--- | :--- |
| Maintenance | $\$ 395,000$ |
| Materials handling | $\$ 260,000$ |
| Sales order processing | $\$ 315,000$ |

You estimate that the machine costs are variable costs, with the total expenditure being determined by the number of hours of use. In the next year, the machines are expected to run for 24,000 hours.

The maintenance cost has three components, machine set up, preventative maintenance and repairs. Preventative maintenance, which represents $40 \%$ of the maintenance cost, is carried out on the basis of the planned machine hours. Repairs tend to reflect the level of use of the machine. $22 \%$ of the maintenance cost is for repairs. The balance of the maintenance cost is for machine set up, with 200 production runs expected in the next year.
Materials are ordered from suppliers on a planned delivery basis, with 20 deliveries each week. As the production staff work in shifts, production will operate throughout the year, with no breaks for holidays.

Customers will place sales orders by telephone and via the internet. John Jackson anticipates that internet sales will account for $60 \%$ of the order processing cost. He estimates that 36,000 orders will be received via the internet, while 12,000 telephone sales will be received. Each order is treated as a separate job.

## Required:

(a) Calculate the overhead cost of an average job based on both John Jackson's current pricing policy and ABC;
(15 marks)
(b) Assuming that your estimates are correct, draft a memo to John Jackson which recommends whether or not he should adopt $A B C$.

## End of Question Paper

