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## Diploma in Financial Management

PAPER DA1, INCORPORATING SUBJECT AREAS

- INTERPRETATION OF FINANCIAL STATEMENTS
- PERFORMANCE MANAGEMENT

MONDAY 5 DECEMBER 2005

## 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

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 When the financial statements of a company are published, they include a note explaining the accounting policies which have been selected, and an auditor's report stating whether or not the financial statements give a true and fair view.

Who is responsible for selecting accounting policies and ensuring that the financial statements give a true and fair view?

Selecting accounting policies
A Board of directors
B External auditors
C External auditors
D Board of directors

True and fair view
Board of directors
Board of directors
External auditors
External auditors

2 Which of the following bodies issues documents known as Abstracts?
A The Financial Reporting Council (FRC)
B The Urgent Issues Task Force (UITF)
C The Accounting Standards Board (ASB)
D The Financial Reporting Review Panel (FRRP)

3 Garden Ltd has a 30 November year end. On 10 November 2005 the company bought a machine for £85,000. A cheque for $£ 5,000$ was paid to the supplier and the balance of the purchase price was financed by taking out a loan for $£ 80,000$. The loan will be repaid in 10 equal half yearly instalments, with the first instalment falling due on 10 May 2006.

How will this transaction be reported on Garden's balance sheet at 30 November 2005?
A A fixed asset of $£ 85,000$, a current liability of $£ 64,000$ and a long term liability of $£ 16,000$
B A fixed asset of $£ 85,000$ and a long term liability of $£ 80,000$
C A fixed asset of $£ 85,000$, a current liability of $£ 16,000$ and a long term liability of $£ 64,000$
D A fixed asset of $£ 85,000$ and a current liability of $£ 80,000$

4 At 1 November 2004 the fixed assets of Field Ltd had a net book value of $£ 2,758,940$. During the year to 31 October 2005, assets with a net book value of $£ 273,790$ were sold at a loss of $£ 15,850$, and new assets costing $£ 568,900$ were purchased.

What amount will be reported for the net capital expenditure on Field's cash flow statement for the year to 31 October 2005?

A £257,940
B $£ 295,110$
C £310,960
D £568,900

5 For the year to 31 October 2005 the profit and loss account of Meadow Ltd reported a profit after tax of $£ 1,695,800$. During the year, the company had recorded a depreciation charge of $£ 567,400$, an impairment loss of $£ 66,000$, and a gain on revaluation of $£ 255,900$.

What amount will be reported for 'Total gains and losses recognised since last report' in the company's Statement of Total Recognised Gains and Losses for the year to 31 October 2005?

A £1,318,300
B $£ 1,695,800$
C $£ 1,885,700$
D $£ 1,951,700$

6 In the year to 30 November the retained profit of Dale Ltd was $£ 3,640,500$. This was after paying dividends as follows:

Ordinary: $\quad 5 p$ per share on 1.5 million shares
Preference: 7 p per share on 600,000 shares
What figure will be reported for basic earnings per share (as defined in FRS 14 - Earnings per Share)?
A $173.4 p$
B $\quad 176.9 p$
C $\quad 242 \cdot 7 p$
D 247.7p

7 The draft 2005 balance sheet of Vale Ltd reported a retained profit of $£ 1,644,900$ and net assets of $£ 6,957,300$. Following the completion of the draft 2005 balance sheet it was discovered that several items of stock had been valued at selling price at the 2004 year end. This meant that the opening stock value for 2005 was overstated by $£ 300,000$. The closing stock had been correctly valued in the draft 2005 balance sheet.

If the error is corrected before the 2005 balance sheet is finalised, what figures will be reported for retained profit and net assets?

|  | Retained profit | Net assets |
| :--- | :--- | :--- |
| A | $£ 1,644,900$ | $£ 6,657,300$ |
| B | $£ 1,644,900$ | $£ 6,957,300$ |
| C | $£ 1,944,900$ | $£ 6,657,300$ |
| D | $£ 1,944,900$ | $£ 6,957,300$ |

8 At 30 November 2005 the fixed assets of Grass Ltd had a net book value of $£ 2,567,900$. The tax written down value was $£ 1,670,000$. The balance brought forward on the deferred tax account was $£ 104,320$. The tax rate is $22 \%$.

What amount will be reported in the Profit and Loss Account for the year to 30 November 2005 for deferred taxation?

A a credit of $£ 93,218$
B a credit of $£ 104,320$
C a charge of $£ 93,218$
D a charge of $£ 104,320$

9 When reviewing the financial statements of a company in which you are a shareholder, you note that during the past year the company has:
(i) raised a long term loan to finance the purchase of fixed assets; and
(ii) reduced the value of closing stock

How will the current ratio and the gearing ratio be affected in comparison to last year?

## Current ratio Gearing

A Increased Decreased
B Decreased Increased
C Decreased Decreased
D Increased Increased

10 The accountant of Flower Ltd has prepared draft accounts for the year to 30 September 2005.
On 1 December 2005 after the draft accounts had been completed, the accountant received a letter regarding an accident which had taken place on 14 September 2005. The accident had destroyed a machine with a net book value of $£ 275,000$. The company’s insurance policy has an excess of $£ 30,000$. The accountant had taken this into consideration when drafting the accounts. The insurance company's letter informed Flower Ltd that as the accident had been caused by negligence, the entire loss was uninsured.

How should the information in the letter be reflected in the draft accounts?
A There will be no effect on the draft accounts
B A note should be included explaining the post balance sheet event
C A charge of $£ 245,000$ is required
D A charge of $£ 275,000$ is required

The following information is relevant to questions 11 and 12 .
Jardin Ltd manufactures a single product. The budgeted sales volume for the next year is 275,000 units. Total cost per unit is $£ 16$. This includes $£ 3$ per unit of fixed costs. Each unit sells for $£ 25$.

11 What is the margin of safety (expressed in units)?
A 68,750
B 91,667
C 183,333
D 206,250

12 How many units must be sold to achieve a profit of $£ 100,000$ (to the nearest unit)?
A 33,000
B 64,462
C 77,083
D 91,667

13 Park Ltd is developing a number of new products. New legislation means that one of these products will not be viable unless additional expenditure, estimated at $£ 450,000$, is undertaken. This figure excludes $£ 200,000$ which is the estimate of the contribution which will be lost through the delay to another project due to the transfer of resources. To date $£ 4 \cdot 7$ million has been spent on the project. It is estimated that before the change in legislation, $£ 2 \cdot 1$ million was required to bring the product to the launch stage.

What is the sunk cost of the project?
A £200,000
B $£ 450,000$
C $£ 2,100,000$
D $£ 4,700,000$

14 Which of the following best describe the term 'opportunity cost'?
A the benefits which would have been obtained from the next best alternative foregone
B the difference in relevant costs between two choices
C a future cost which cannot be avoided
D an assumed cost to reflect the use of a benefit, for which no cash is paid

15 The cost per unit of a product manufactured by Arbor Ltd is:
Direct material £12
Direct labour £17
Direct overheads £7
Share of fixed costs £12
Total cost £48

Arbor uses marginal cost plus pricing.
If Arbor seeks a $40 \%$ margin on sales, what is the selling price of the product?
A $£ 50.40$
B $£ 60 \cdot 00$
C $£ 67 \cdot 20$
D $£ 80 \cdot 00$

16 Which of the following best describes the Residual Income of a division?
A the remaining profit after all divisional costs have been charged
B the remaining profit after a charge for the use of central resources
C the remaining profit after a charge for the use of capital invested
D the remaining profit after the charge for taxation

17 The book value of the capital employed in the Southern division of Beltair plc is $£ 25.4$ million. The market value of the net assets is $£ 29 \cdot 2$ million. The divisional weighted average cost of capital is $13 \%$, and funds were recently borrowed at $11.5 \%$. The operating profit after tax for the last year was $£ 3.89$ million.

What is the Economic Value Added (EVA®) for the Southern division?
A £94,000
B $£ 532,000$
C $£ 588,000$
D £969,000

18 A statement of variances shows an adverse labour rate variance and a favourable materials price variance.
What is the most likely explanation for the variances?
A A lower grade of both staff and materials was used
B A higher grade of both staff and materials was used
C A higher grade of staff and a lower grade of materials was used
D A lower grade of staff and a higher grade of materials was used

19 Consider the following statements regarding outsourcing:
(i) outsourcing is generally undertaken to reduce costs
(ii) core competences should be outsourced whenever possible

## Which of the following combinations is correct?

Statement (i) Statement (ii)
A Correct
Correct
B Correct Not correct
C Not correct Correct
D Not correct Not correct

20 Admedia Ltd provides an advertising design and production service to clients. The production section is the only customer of the design section, with all design work being transferred at full cost plus $40 \%$. The production section charges clients $£ 90$ per hour. In the forthcoming three months, Admedia has budgeted that 7,000 hours will be charged to clients. The budgeted costs are:

|  | Design | Production |
| :--- | :--- | :--- |
| Variable costs | $£ 29$ per hour | $£ 35$ per hour |
| Fixed costs | $£ 56,160$ | $£ 172,000$ |
| Hours | 2,400 | 7,000 |

What is the budgeted profit for the two sections?

|  | Design | Production |
| :--- | :--- | :--- |
| A | $£ 22,464$ | $£ 87,240$ |
| B | $£ 50,304$ | $£ 36,936$ |
| C | $£ 27,840$ | $£ 115,560$ |
| D | $£ 50,304$ | $£ 213,000$ |

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 You are employed as a project manager by Mondav Ltd, a long established technology company. To date the company's business has been confined to the UK and Ireland, but the directors now plan to expand into international markets. The directors have discussed how to raise the additional funds for the anticipated expansion. Two possibilities under consideration are:
(i) issuing additional share capital; and
(ii) arranging finance lease facilities for some of the major items of capital expenditure.

At present, the company's financial structure includes a five-year term loan, which was taken out two years ago. As the rate of interest is highly competitive, the directors do not wish to repay this loan and replace it with new funds. Under the terms of the Ioan, Mondav's current ratio is required to remain above 1.6 and the gearing ratio must not rise above 60\%.

At their next meeting, the directors intend to make a decision about the method of funding the expansion. A nonexecutive director has commented that the proposal to arrange leasing facilities makes sense, as this is 'a good way of keeping the financing off the balance sheet'. He also noted that it would be a good idea to issue preference shares rather than ordinary shares 'as this will give us access to funds at a fixed cost'.

You have been asked to prepare a briefing paper for circulation to the directors prior to their meeting.

## Required:

Prepare a briefing paper for the directors which:
(a) explains the main differences between ordinary share capital and preference share capital, and indicates how the current ratio and the gearing ratio would be affected by the issue of each type of share;
(8 marks)
(b) comments on the observation that the proposed finance lease would 'keep the finance off the balance sheet', and indicates whether the current ratio and the gearing ratio would be affected if the company enters into a finance lease arrangement, and if so, how;
(8 marks)
(c) briefly discusses other factors to be considered when deciding whether the company should issue preference shares as suggested by the non-executive director.

2 You have recently been appointed as a non-executive director of Alfield Ltd. The company did not employ a full time accountant, and the administration manager has partly completed the company's accounts for the year to 30 November 2005. Adjustments in respect of fixed assets have still to be made.

The directors are due to consider the accounts at their next meeting, and wish the reported value of fixed assets to be as high as possible. You have agreed to advise the administration manager on how to complete the accounts.

You have the following data:
Alfield Ltd Draft Balance Sheet at 30 November 2005
$£ 000$
Fixed assets 1,670
Current assets 347
Creditors: amounts falling due within one year (264)

$$
1,753
$$

Creditors: amounts falling due in more than one year (150)

Total net assets 1,603

Capital and reserves:
Share capital 300
Retained profit 1,303
1,603

Notes:
1 Fixed assets includes the following items:
Cost Depreciation to 30 November 2004
£000 £000
Freehold land nil
Buildings 18066
Plant and machinery $248 \quad 85$
Vehicles 16098
2 The company's depreciation policy is as follows:
Freehold land is not depreciated.
Depreciation on the other assets is provided as follows:
Buildings straight line over 30 years
Plant and machinery straight line at $15 \%$ per annum
Vehicles $\quad 20 \%$ per annum, reducing balance
3 The freehold land was bought in January 2005. Its value at 30 November 2005 is $£ 480,000$.
4 Over the last two years the location of the buildings has suffered occasional flooding. The directors were unsure if this led to an impairment and carried out a valuation of the buildings. The buildings were valued at $£ 100,000$.

## Required:

(a) Briefly explain the nature of depreciation and impairment and comment on whether the company's depreciation policy complies with generally accepted accounting practice.
(6 marks)
(b) Calculate the adjustments which should be made to the reported value of fixed assets in respect of the information in notes 1-4 above.
(6 marks)
(c) Prepare the revised balance sheet at 30 November 2005, after making the adjustments in respect of the information in notes 1-4 above.

3 On 1 December 2003 Nicie Ltd took control of Sashie Ltd by acquiring $80 \%$ of the share capital for $£ 1 \cdot 7$ million. At 1 December 2003, the net assets of Sashie had a value of $£ 1 \cdot 8$ million, and the retained profit was $£ 1,187,000$. Goodwill arising on the acquisition is to be amortised over five years.

A recently appointed non-executive director of Nicie is unsure why Sashie is treated as a subsidiary, rather than an associated undertaking, or how the combined trading results of the two companies will be reported.

The profit and loss accounts of both companies for the year to 30 November 2005 are shown below:

|  | Nicie | Sashie |
| :--- | ---: | ---: |
|  | $£ 000$ | $£ 000$ |
| Turnover | 5,126 | 1,543 |
| Cost of sales | 3,728 | 1,071 |
| Gross profit | 1,398 | 472 |
| Expenses | 678 | 231 |
| Profit before taxation | 720 | 241 |
| Taxation | 143 | 41 |
| Profit after taxation | 577 | 200 |
| Retained profit brought forward | 3,168 | 1,257 |
| Retained profit carried forward | 3,745 | 1,457 |

Required:
(a) Briefly state the difference between a subsidiary company and an associated undertaking.
(b) Calculate:
(i) the goodwill arising on the acquisition;
(ii) the annual charge for amortisation of goodwill;
(iii) the amount of unamortised goodwill at 30 November 2005; and
(iv) the value of consolidated reserves at 1 December 2004.
(c) Prepare the consolidated profit and loss account of the Nicie Group Ltd for the year to 30 November 2005, including the consolidated reserves brought forward and carried forward.

## 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 a consultant with QA Management Consultants. One of your clients is Sharpe Telecommunications Ltd (STL). The company manufactures telecommunications equipment. Having been finance director for the last four years, Gillian Sharpe has recently taken over as managing director.

Gillian believes that there is an increasing threat from competitors. She has discussed this with the management team, most of whom have been with STL for more than 10 years. The management team acknowledges the need for change, but no definite proposals have been put forward. Gillian has asked you to work with her and the management team to develop an action plan.

Your notes of a recent meeting with Gillian and the management team include the following points:
(i) customers are demanding quicker responses to orders.
(ii) while STL has a good reputation for quality, this is a function of good quality control at the end of the production process. Very few units are returned by customers, but the quality control department can reject as much as $4.5 \%$ of products produced. Rejected products can invariably be reworked so that they meet the required standards.
(iii) staff regard the quality control department as the guardian of quality standards.
(iv) to date, the management style has been 'top-down'. Many of the 185 production staff have been with STL for more than eight years, and are highly skilled.
(v) the production process is currently organised on a product basis, with a linear process used to produce each product. Staff will often switch between product lines to cover holidays and absences or to achieve specific production deadlines.
(vi) profit margins have declined by $1.7 \%$ in the last year, due to an increase in costs. Due to STL's ability to manage the quality of products delivered to the customer, it has been possible to increase sales prices by $4 \cdot 3 \%$. The cost of rework has been identified as the key factor in the erosion of the sales margin.

You have suggested to Gillian that business process re-engineering, and specifically a move to cellular manufacturing, should be considered. In making this suggestion, you observed that this would almost certainly lead to the flexibility demanded by customers as well as a reduction in costs.

Gillian remarked that it will be important that all employees, starting with the management team, are convinced that these outcomes can be achieved. To that end, she has asked you to prepare a report to the management team which provides an overview of your suggestions, and clearly links the expected benefits to the initiatives.

## Required:

Prepare a report to the management team which briefly:
(a) explains the nature of business process re-engineering in general, and cellular manufacturing in particular;
(b) outlines the benefits which STL could expect if cellular manufacturing is introduced;
(4 marks)
(c) explains how a quality improvement programme is likely to lead to improved margins for STL; and
(4 marks)
(d) suggests three benefits which will accrue to the production staff if your suggestions are implemented.

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Question 5 begins on page 12.

5 (a) Stewson Ltd manufactures three different products, each of which requires two key materials. You have recently been appointed as the company's operations manager. You have noted that sales have been lost in the past as the specific products required by customers are unavailable. The sales manager has stated that although he can estimate the likely sales volume for each product with reasonable accuracy for a three month period, this never seems to be reflected in the production plan. He has provided the following estimates for the next three months:
Estimated sales volumes (units)

| Product | Roges | Grarom | Miley |
| :--- | :---: | :---: | :---: |
| January | 4,000 | 3,100 | 2,400 |
| February | 4,400 | 3,500 | 2,100 |
| March | 4,600 | 3,900 | 2,700 |

When you asked the production manager why the production plan did not reflect the expected sales volumes, you were told that production was driven by the availability of raw materials, as the company buys materials in order to benefit from any fall in prices. This means that at times there will be a surplus of one material and a shortage of another.

The material requirements for each product are:

| Product | Roges | Grarom | Miley |
| :--- | :---: | :---: | :---: |
| Material: |  |  |  |
| Alox kg | 8 | 11 | 15 |
| Leick kg | 6 | 9 | 11 |

The production manager stated that he feels the company should maintain a stock of raw material at the end of each month which is sufficient for $20 \%$ of the production requirement for the next month. The sales manager indicated that if the plans were properly coordinated, the finished goods stock could be held at a constant rate for each product as follows:
Finished goods stock (units)

| Product | Roges | Grarom | Miley |
| :---: | :---: | :---: | :---: |
|  | 1,000 | 500 | 1,800 |

You have estimated that at the end of December, the stock levels will be:

| Raw materials | Alox | $2,400 \mathrm{~kg}$ |
| :--- | :--- | ---: |
|  | Leick | $4,800 \mathrm{~kg}$ |
| Finished goods | Roges | 400 units |
|  | Grarom | 2,900 units |
|  | Miley | 800 units |

## Required:

Prepare monthly budgets for January and February for:
(i) Production volume for each product; (6 marks)
(ii) Material usage volume for each material; and
(iii) Material purchase volume for each material.
(b) The production manager has observed that if it were possible to estimate the sales volumes for more than three months, the company could enter into longer term contracts with suppliers. This would allow better raw material prices to be negotiated. He feels that a key element in this is ensuring that the sales force is motivated to achieve sales targets. To that end he has proposed that an incentive scheme be introduced. The sales manager has agreed in principle with this proposal and has recommended that commission, based on sales revenue, should be paid to the sales force.

The selling price of each product is:
Roges £140
Grarom £165
Miley £210

## Required:

## Draft a memo to the sales manager which:

(i) indicates three generally accepted characteristics of an effective incentive scheme; and
(ii) highlights three possible problems with paying sales commission based on sales revenue.

6 (a) You have recently been appointed to the post of general manager with a new company, Minchic Ltd. The company has been established by three investors to manufacture new products which they have developed.

A budget which includes the data below has been prepared for the first year of operation:

| Product | STA | RPA | MNA |
| :--- | ---: | ---: | ---: |
| Selling price (per unit) | $£ 320$ | $£ 360$ | $£ 450$ |
| Direct material (per unit) | $£ 95$ | $£ 108$ | $£ 125$ |
| Direct labour (per unit) | $£ 85$ | $£ 98$ | $£ 106$ |
| Production volume (000s units) | 65 | 55 | 45 |
| Machine hours (per unit) | $0 \cdot 4$ | $0 \cdot 8$ | $1 \cdot 4$ |
| Number of production runs (p.a.) | 42 | 33 | 25 |
| Number of orders (p.a.) | 385 | 274 | 147 |

It has been agreed that overheads will be applied to products using Activity Based Costing (ABC). Annual overheads are estimated to be:

| Machine running costs | $£ 4,655,000$ |
| :--- | ---: |
| Production set up costs | $£ 460,000$ |
| Order processing costs | $£ 443,300$ |
| Total | $£ 5,558,300$ |

## Required:

Calculate the cost per unit of each product using ABC.
(b) When the budget was prepared, the forecast sales volumes were:

| Product | STA | RPA | MNA |
| :--- | :---: | :---: | :---: |
| Sales volume (x 1,000 units) | 60 | 50 | 45 |

In recent months there has been some concern about the environmental impact of one of the raw materials which is common to all three products, leading to a fall in consumer confidence. The directors are confident that the fall in consumer confidence will only affect the next year, as three separate independent research projects will be published in the near future, and all of these will clearly demonstrate that there are no grounds for concern. The directors have concluded that if no action is taken, actual sales volumes in the next year will be less than forecast, and have produced the following estimates:

| Anticipated actual sales <br> Units $\times 1,000$ |  |  | Probability of occurrence <br> $\%$ |
| :--- | :---: | :---: | :---: |
| STA | RPA | MNA |  |
| 48 | 40 | 36 | 15 |
| 51 | 42 | 38 | 45 |
| 56 | 46 | 42 | 40 |

The directors believe that sales volumes could be maintained at $95 \%$ of the original forecast if a substitute material was used and an advertising campaign was undertaken.
The substitute material would add $£ 5$ to the unit cost of each product, while the advertising campaign would cost $£ 120,000$. In view of the short term impact, production volumes will be unaffected.

The directors wish to assess whether to use the substitute material and undertake the advertising campaign.

## Required:

(i) Calculate the expected value of the contribution which will be earned in the next year if no action is taken.
(5 marks)
(ii) Assess whether it is beneficial to use the substitute material and undertake the advertising campaign.
(6 marks)

