# **EXAMINATION**

### 23 April 2009 (am)

## Subject CT2 — Finance and Financial Reporting Core Technical

#### *Time allowed: Three hours*

#### INSTRUCTIONS TO THE CANDIDATE

- 1. Enter all the candidate and examination details as requested on the front of your answer booklet.
- 2. You must not start writing your answers in the booklet until instructed to do so by the supervisor.
- *3. Mark allocations are shown in brackets.*
- 4. Attempt all 20 questions. From question 11 onwards begin your answer to each question on a separate sheet.
- 5. *Candidates should show calculations where this is appropriate.*

Graph paper is not required for this paper.

#### AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list. For questions 1–10 indicate in your answer book which one of the answers A, B, C or D is correct.

- **1** A company's ordinary shares have a nominal value of 25p. The current market price of a share is 90p. The directors are planning to issue new shares. Which of the following statements best describes the restrictions on the issue price for the new shares?
  - A The directors are not permitted to issue the shares for less than 25p or for more than 90p.
  - B The directors are not permitted to issue the shares for less than 25p and are unlikely to be able to sell them for more than 90p.
  - C The directors are not permitted to issue the shares for more than 90p, but can sell them for any amount below that.
  - D The directors are not permitted to sell the shares for less than 90p.

[2]

2 A company renews its bank overdraft facility in September of every year and last renewed it in September 2008. The company went overdrawn in February 2009 by an amount that was less than the overdraft facility. The finance director gave the bank manager a cash forecast that indicates that the overdraft is likely to be repaid in June 2009.

Which of the following is the earliest that the bank would be permitted to demand settlement of the amount borrowed on overdraft?

- A immediately
- B June 2009
- C September 2009
- D never, so long as the company remains within agreed overdraft limits

[2]

- **3** A UK manufacturing company has entered into a futures contract that requires it to deliver an agreed sum of \$US to a counterparty at an agreed date in the future. Which of the following best describes the likely impact on the manufacturing company's margin on the contract if the value of the \$US rises against the company's home currency?
  - A Some of the margin paid to date will be returned to the company.
  - B The margin will remain unchanged.
  - C An additional margin will have to be deposited by the manufacturing company.
  - D The margin will have to be renegotiated between the two parties to the contract.

[2]

- 4 An actuarial consultancy is due to receive a substantial payment in \$US from an overseas client on 31 July 2009. It has decided to purchase an option to protect itself from fluctuations in the value of the \$US. Which of the following attributes is the most important aspect of the option contract?
  - A It should be an American option.
  - B It should be a European option.
  - C It should be a call option to buy dollars.
  - D It should be a put option to sell dollars.

[2]

- 5 Which of the following is a realistic "worst case" scenario for an issuing house that has underwritten a share issue?
  - A There are no risks associated with underwriting share issues.
  - B The underwriter may not receive the agreed fee in full.
  - C The underwriter may have to purchase some shares and either hold them or resell them at a loss.
  - D The underwriter may be exposed to a potentially unrestricted loss.

[2]

- **6** Which of the following is NOT a potentially valid interpretation of the fact that the creditors' turnover period based on figures from a company's annual report is very rapid?
  - A The company wishes to maintain an excellent relationship with its suppliers.
  - B There are limitations in the relevance of the figures in the annual report.
  - C The company is having difficulty in obtaining trade credit.
  - D The company has no liquidity problems.

[2]

- 7 A company has asked a potential supplier to provide trade credit and has submitted its most recent set of audited financial statements to demonstrate its liquidity position. Which of the following is the most likely limitation of the financial statements for this purpose?
  - A It is impossible to assess liquidity from published financial statements.
  - B The statements are liable to have been distorted.
  - C The statements have been prepared by the directors and lack credibility.
  - D The statements will be out of date for this purpose.

[2]

- 8 Which of the following is likely to cause the greatest concern for a shareholder who wishes to analyse the liquidity position of a company?
  - A an increasing current ratio
  - B an increasing quick ratio
  - C a declining current ratio
  - D a declining quick ratio

[2]

- **9** Which of the following best describes the responsibility of an external auditor?
  - A to express an opinion on the financial statements
  - B to certify the accuracy of the financial statements
  - C to eliminate agency problems
  - D to express an opinion on corporate governance matters

[2]

10 A company has inventories of £500,000, trade receivables of £600,000, a bank overdraft of £200,000 and trade payables of £450,000. What is the company's quick ratio?

- A 0.8:1 B 0.9:1 C 1.3:1
- D 1.7:1

[2]

11 Two actuaries have decided to go into business. They intend to borrow heavily in order to pay a substantial deposit on the rental of premises, to invest in computers and other equipment and to meet routine running costs for the first few months of operations.

The actuaries do not wish to accept personal risk for the liabilities of the business and have decided to form a limited company.

Explain the extent to which the actuaries will succeed in avoiding personal liability by incorporating their business as a limited company.

[5]

12 In many countries companies are not permitted to treat depreciation as an expense for tax purposes. Instead, they are allowed to deduct a capital allowance, which is effectively a depreciation charge that is calculated in a very rigid and prescriptive manner.

Explain why tax rules deal with depreciation in this manner. [5]

- 13 Describe the risks associated with investing in debenture stocks. [5]
- 14 Explain why the directors of a company might wish to have a steady and consistent dividend policy. [5]
- 15 A company has several divisions, each of which operates on a geographical basis and in the same line of business. Divisional managers can submit proposals for capital investment projects for consideration by senior management at head office. An analysis of proposals received in the past three years indicates that some divisional managers submit far more proposals than others and that some divisional managers are consistently more optimistic than others in their proposals.

Explain why such behaviour might occur and why it creates problems for companies. [5]

- **16** Describe the purpose of the standard setting system that regulates the preparation of published financial statements. [5]
- 17 Explain, using examples, how the directors of a limited company could create a misleading impression of their company's profitability in the published financial statements. [5]
- **18** Discuss whether the maximisation of shareholder wealth can be realistically regarded as the guiding principle by which companies are managed. [5]
- **19** The following information was extracted from the accounting records of Maker plc:

| Maker plc<br>Trial balance as at 31 March 2009 |       |
|--|-------|
|  | £m    |
| Administrative expenses                        | 24    |
| Bank overdraft                                 | 6     |
| Delivery vehicles – cost                       | 380   |
| Delivery vehicles – depreciation               | 140   |
| Factory – cost                                 | 600   |
| Factory – depreciation                         | 64    |
| Interest paid                                  | 120   |
| Inventory at end of year                       | 16    |
| Long term loan                                 | 600   |
| Machinery – cost                               | 580   |
| Machinery – depreciation                       | 160   |
| Manufacturing costs                            | 34    |
| Raw materials consumed                         | 440   |
| Retained earnings as at start of year          | 166   |
| Running costs for delivery vehicles            | 80    |
| Sales  | 1,200 |
| Share capital                                  | 220   |
| Trade payables                                 | 52    |
| Trade receivables                              | 140   |
| Wages – administrative staff                   | 42    |
| Wages – delivery drivers                       | 28    |
| Wages – manufacturing staff                    | 124   |

The directors had the factory revalued on 1 April 2008. It was valued at £700m, although this valuation has not yet been incorporated into the company's bookkeeping records.

Depreciation has yet to be charged on the non-current assets. The following rates are to be used:

- Factory 2% of cost or more recent valuation
- Delivery vehicles 25% reducing balance
- Machinery 10% of cost
- (i) Prepare, using the above information, an income statement for the year ended 31 March 2009 and a balance sheet as at that date. [12]
- (ii) Outline the advantages and disadvantages of revaluing the factory. [4]
- (iii) At 1 April 2008 the company had a positive bank balance of £4m. Explain why the change in the balance from the opening figure to that shown in the above trial balance might differ from the profit or loss calculated in your income statement. [4]

[Total 20]

20 You have been asked to clarify a number of matters for the board of directors of a major company that is considering a massive investment. The directors have decided that all major investments will be evaluated in terms of their net present value (NPV) and that NPV will be determined in a relevant and meaningful manner. Unfortunately, they cannot agree on the application of the best way to calculate NPV.

The company has a beta coefficient of 1.6. It has a market capitalisation of  $\pounds 60$  million. The company is financed entirely by equity. The directors believe that their high beta coefficient has depressed the market capitalisation and so they wish to invest in some new lines of business.

The directors are considering an investment that will reduce the company's beta. They intend to borrow £20 million at an interest rate of 8%. They intend to invest the whole amount in a new business venture that is significantly different from the present business. This venture is in a business area where companies traditionally have beta coefficients of approximately 1.1, although the directors feel that the business is so different from the existing industry that there is an even greater diversification effect.

The directors are considering evaluating the NPV of the investment in terms of the company's present cost of equity, although two members of the board believe that this rate is theoretically incorrect. One board member believes that the cost of equity will be affected by the investment and that it should be used in place of the present rate and another believes that the weighted average cost of capital, revised to allow for the fresh investment and the new borrowing, should be used.

The risk free rate of return is 4%. The market risk premium is 6%. The company's effective tax rate is 28%.

- (i) Use the capital asset pricing model (CAPM) to:
  - (a) Calculate the company's present cost of equity.
  - (b) Estimate the company's ungeared beta, assuming that it proceeds with the investment.
  - (c) Estimate the company's geared beta, assuming that it proceeds with the investment.
  - (d) Determine the company's weighted average cost of capital to proceed with the investment, using the results of your other calculations and estimates.

[8]

- (ii) (a) Discuss the appropriateness of the directors' decision to determine the NPV of the proposed investment in terms of one or other of the measures of the company's cost of capital.
  - (b) State, with reasons, whether there is a more appropriate rate that should be used instead. [6]

(iii) Explain why the directors are mistaken in their belief that their investment in this new venture is even more worthwhile to the shareholders because of the additional diversification effect that it carries.

[Total 20]

### **END OF PAPER**