

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

27 September 2018 (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. *You have 15 minutes of planning and reading time before the start of this examination. You may make separate notes or write on the exam paper but not in your answer booklet. Calculators are not to be used during the reading time. You will then have three hours to complete the paper.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all 20 questions. Answers to questions 1–10 should be indicated on the Multiple Choice Answer Sheet included in your booklet. From question 11 onwards begin your answer to each question on a new page.*
6. *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.

- 1** Which of the following statements about limited companies is correct?
- A A company's shareholders will never be personally liable for the company's obligations.
 - B A small company's shareholders must be directors.
 - C Company directors can be shareholders.
 - D Companies can be managed by professional managers, whereas sole traders and partnerships must be managed by their owners.
- [2]
- 2** Which of the following describes the cost of trade credit?
- A The cost of trade credit is included in the purchase price of the goods being purchased.
 - B The cost of trade credit is known and transparent.
 - C Trade credit is provided free of charge.
 - D Trade credit liabilities can be settled late without consequence.
- [2]
- 3** Which of the following statements is correct?
- A A bank overdraft is more flexible than a fixed term loan.
 - B A bank overdraft must be repaid within a year.
 - C Banks cannot recall overdrafts because doing so would put customers out of business.
 - D Banks generally secure overdrafts against specific assets.
- [2]
- 4** A manufacturing company has been approached by a public limited company (PLC) that wishes to apply for trade credit. Which of the following statements about the applicant's PLC status is correct?
- A A PLC has a stock market quotation, making it more accountable.
 - B A PLC has a widespread shareholding, reducing the risk of conflicting interests.
 - C A PLC is a larger entity than a private limited company.
 - D A PLC is not necessarily more creditworthy than a private limited company.
- [2]

- 5** A quoted company's shares have a nominal value of £1.00 and a market price of £1.10. The company's directors are considering a 1 for 5 scrip issue. Which of the following statements is correct?
- A The company will be unable to issue shares for cash in the immediate future.
 - B The marketability of the company's shares will increase.
 - C The scrip issue will be forbidden by law.
 - D The share price will rise because scrip issues signal confidence.
- [2]
- 6** Which of the following cases is a suitable situation in which a convertible security might be issued?
- A A business startup wishes to issue equity cheaply.
 - B A business startup wishes to reduce its cost of debt.
 - C An established business has a high gearing ratio.
 - D An established company has a low gearing ratio.
- [2]
- 7** Which of the following best describes a 'certainty equivalent' used in project appraisal?
- A The expected value of an uncertain future cash inflow calculated using probability theory.
 - B The fixed amount that the decision maker would accept as an alternative to an uncertain expectation.
 - C The market price of an uncertain future cash flow, taking account of observable values such as beta coefficients.
 - D The smallest amount that is anticipated from an uncertain future cash inflow.
- [2]
- 8** Which of the following best describes the difference between basic and diluted earnings per share (EPS)?
- A Diluted EPS adjusts for any planned share issues that the directors plan to implement during the next financial year.
 - B Diluted EPS adjusts for the impact of additional share issues that have been made in the course of the year.
 - C Diluted EPS adjusts for the potential effects of instruments that grant the right to purchase additional shares.
 - D Diluted EPS takes account of decreases in the share price that have occurred during the financial year.
- [2]

- 9** A manufacturing company had an operating profit of £30.0 million. Finance charges were £1.6 million and tax was £2.5 million. The company's share capital was £80 million, retained earnings were £140 million and long term debt was £20 million.

Calculate the company's return on capital employed (ROCE).

- A 11.5%
- B 12.5%
- C 12.9%
- D 13.6%

[2]

- 10** A company owns an item of equipment that cost £10,000 on 1 July 2010. The equipment's estimated useful life was 10 years, at which time its estimated scrap value was £3,000. What is the depreciation charge on this equipment for the year ended 30 June 2018, assuming the straight line method of depreciation?

- A £700
- B £1,000
- C £1,300
- D £4,400

[2]

- 11** Explain how market forces might protect the shareholders in quoted companies from agency problems. [5]

- 12** Explain the implications of margin payments for companies which use futures to manage the risks associated with their finances. [5]

- 13** A quoted company is evaluating a potential investment opportunity.
Explain the relevance of opportunity costs to the evaluation of that opportunity. [5]

- 14** Discuss the assertion that a company's optimal gearing ratio could be affected by its line of business. [5]

- 15** The directors of Fentron plc, a major quoted company, are concerned that the company's price earning (P/E) ratio is low.
Explain the significance of the low P/E ratio to Fentron plc's directors. [5]

- 16** Kate has invested her savings in equities issued by quoted companies. In September 2018 she received the annual report for the year ended 30 June 2018 of Contro plc, a major manufacturing company.

Kate is concerned that the liquidity ratios calculated on the basis of Contro plc's statement of financial position look weak. She had similar concerns when she received the 2017 annual report.

Discuss Kate's concern. [5]

- 17** A company is profitable and it has increased its bank balance every year for the past three years. Describe why it is necessary for such a company to prepare a cash flow statement. [5]

- 18** Describe the purpose of the external audit of financial statements. [5]

19 The following information was obtained from the accounting records of Nolton plc, as at 30 June 2018.

- (i) Prepare Nolton plc's financial statements in a form suitable for publication:
- statement of comprehensive income for the year ended 30 June 2018 [8]
 - statement of changes in equity for the year ended 30 June 2018 [2]
 - statement of financial position as at 30 June 2018 [5]
- (ii) Discuss the proposition that the gain on the revaluation of property should be taxed. [5]
- [Total 20]

Nolton plc

Trial balance as at 30 June 2018

	<i>\$000</i>	<i>\$000</i>
Administrative expenses	7,514	
Cash at bank	1,238	
Dividends paid	809	
Loan interest	355	
Loans		2,890
Management salaries	10,924	
Manufacturing costs	13,872	
Manufacturing materials – opening inventory	4,913	
Manufacturing purchases	32,021	
Manufacturing wages	8,959	
Plant and equipment – accumulated depreciation		7,514
Plant and equipment – cost	56,644	
Property – accumulated depreciation		12,340
Property – cost	26,010	
Retained earnings		9,879
Revaluation reserve		3,000
Revenue		135,418
Sales commissions	7,118	
Selling expenses	7,101	
Share capital		13,005
Share premium		3,468
Trade payables		1,471
Trade receivables	11,507	
	<u>188,985</u>	<u>188,985</u>

Further information

- (1) All depreciation has been charged for the year and recorded in the relevant accounts.
- (2) Property was revalued at \$16 million on 30 June 2018. This revaluation has not yet been recorded in the accounting records.
- (3) The closing inventory of manufacturing materials was counted and valued at \$5,274,000.
- (4) The corporation tax charge has been estimated at \$5,700,000.

- 20** Doron is an unquoted company which was founded 12 years ago and which has grown steadily since. Its directors are considering an investment opportunity that will increase the productive capacity of the business by 30%.

Doron was established using the savings of its three founders, who now comprise the company's board of directors. Each of the three founders owns one third of the company's equity. Doron's growth has been funded using retained earnings and the proposed expansion will be funded in the same way. The company has no debt. None of the founders has any other significant personal assets apart from their shares in Doron and their family homes.

The founders are considering more sophisticated approaches to the evaluation of capital investment projects. They have asked you to determine Doron's cost of equity. They have established the following facts:

- The risk free rate is 4% per annum.
- The equity risk premium is 10% per annum.
- The beta coefficient of a quoted company which is in the same industry as Doron is 1.4.
- The above quoted company has a debt:equity ratio of 0.6:1.
- The corporation tax rate is 20%.

- (i) Calculate Doron's cost of equity. [6]
- (ii) Discuss the relevance of the rate that you calculated in part (i) to the evaluation of the project to expand Doron. [7]
- (iii) Discuss the relevance of the rate that you calculated in part (i) to the three founders. [7]

[Total 20]

END OF PAPER