

# INSTITUTE AND FACULTY OF ACTUARIES



## EXAMINATION

26 September 2013 (pm)

### 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** An Australian trader is due to receive a substantial receipt in Euros in three months' time. Which of the following best explains why the trader might use a currency option rather than a currency future to hedge this transaction?

- A The value of currency futures can be highly volatile.
- B The counterparty to a financial future might default and leave the position exposed.
- C An option will provide scope for an upside if the Euro strengthens.
- D An option will provide scope for an upside if the Euro weakens.

[2]

**2** Which of the following is an unsystematic (specific) risk?

- A Interest rates may change.
- B Company directors may make bad decisions.
- C Consumer demand can be affected by global economic cycles.
- D Basic commodity prices can change.

[2]

**3** A company has a policy of investing in projects on the basis of their internal rate of return (IRR). Which of the following is a drawback of using IRR?

- A Positive net present value projects may be rejected.
- B High yield investment opportunities may be overlooked.
- C IRR is more difficult to interpret than Net Present Value (NPV).
- D Ranking mutually exclusive projects on the basis of IRR may give misleading results.

[2]

- 4** Which of the following best illustrates an opportunity cost?
- A Accepting a project with a negative net present value.
  - B Rejecting a project with a positive net present value because of funding constraints.
  - C Understating the projected return on a potentially positive net present value project in order to adjust for risk.
  - D Rejecting a project with a positive net present value because it has been decided to invest the available funds in a different project.
- [2]
- 5** Use the following information to calculate return on capital employed.
- |                                |       |
|--------------------------------|-------|
| Profit before interest and tax | £40m  |
| Interest                       | £8m   |
| Ordinary shares                | £110m |
| Retained earnings              | £300m |
| Revaluation reserve            | £22m  |
| Long term borrowings           | £90m  |
- A 6.1%
  - B 6.4%
  - C 7.7%
  - D 8.0%
- [2]
- 6** What is the most realistic interpretation of a low interest cover ratio in a highly cash generative business?
- A Any fluctuation in operating profit will lead to a greater fluctuation in earnings per share.
  - B The company may be unable to meet its loan repayments.
  - C The company may be unable to pay its interest.
  - D The company may be in breach of its debt covenants.
- [2]

- 7** What is the difference between profit and comprehensive income?
- A Profit is calculated in accordance with International Financial Reporting Standards (IFRS) and comprehensive income is not.
  - B Comprehensive income covers a longer period than profit.
  - C Profit must be disclosed but comprehensive income need not.
  - D Comprehensive income includes unrealised gains that are excluded from profit.
- [2]
- 8** An external auditor cannot conduct an adequate audit because the directors have withheld a significant amount of vital audit evidence. What form of external audit report would be appropriate in these circumstances?
- A Adverse opinion
  - B Disclaimer of opinion
  - C Emphasis of matter
  - D Except for opinion
- [2]
- 9** Which of the following best summarises the difference between straight line and reducing balance depreciation?
- A Reducing balance will lead to a higher charge in the short term after fresh investment in assets and a higher total charge over the life of the assets.
  - B Reducing balance will lead to a lower charge in the short term after fresh investment in assets and a higher total charge over the life of the assets.
  - C Reducing balance will lead to a higher charge in the short term after fresh investment in assets but the same total charge over the life of the assets.
  - D Reducing balance will lead to a higher charge in the short term after fresh investment in assets but a lower total charge over the life of the assets.
- [2]
- 10** Who makes the final decision as to whether International Financial Reporting Standards are used as the basis for accounting in any given country?
- A The International Accounting Standards Board (IASB)
  - B The national government
  - C Professional accountancy bodies
  - D The national stock exchange
- [2]

- 11** Describe the advantages of establishing a business as a limited liability partnership rather than a traditional partnership. [5]
- 12** A quoted company has a policy of making relatively small dividend payments, with profits being reinvested in the business. A period of slow growth in the industry has left the company with a substantial cash surplus as a result of this policy.
- Discuss the advantages to the company and shareholders of reducing this surplus by means of a share buyback rather than a dividend payment. [5]
- 13** An investor has a policy of investing in a number of companies only in the oil and gas industry. She believes that she knows this sector well and that her portfolio has been well diversified internationally.
- Discuss the logic of the investor's investment strategy. [5]
- 14** Discuss the difficulties associated with charging tax on "fringe benefits" to employees. ("Fringe benefits" can be thought of as non-monetary rewards – they exclude wages and salaries.) [5]
- 15** A quoted company's chief engineer has identified an opportunity to develop a project that will offer a huge competitive advantage. Even a conservative estimate of net present value shows that this is likely to be a successful investment. The directors have advised the engineer that they will not proceed with the project because it will be difficult to explain to the shareholders. The technology is simply too difficult to understand and there will be a five year development phase.
- Discuss the logic of the directors' position with respect to this project. [5]
- 16** Discuss the assertion that the cash flow statement is unnecessary because it is easy to see whether the closing bank balance is higher or lower than the opening bank balance. [5]
- 17** A famous accounting scandal involved a company's decision to recognise the premiums from the sale of holiday insurance contracts when the contracts were sold, rather than waiting until after the customer's safe return from holiday (which was the normal practice followed by other companies). There were no specific accounting standards to deal with this matter.
- Discuss the issues associated with recognising the profit from the sale of travel insurance in this way in terms of accounting concepts. [5]

- 18** Alpha is reviewing bids for the construction of a major civil engineering project. One of the shortlisted bidders is Global (Midlands) PLC (“Global”). Alpha is concerned that Global may not have the necessary financial resources to complete this project and has asked for reassurance. Global’s response is that the company is part of the Mega Group, whose parent company is quoted and is based in Alpha’s home country. Global has submitted the Mega Group’s latest consolidated financial statements to demonstrate the solvency of the group.

Discuss the extent to which Alpha should rely on the Mega Group’s consolidated financial statements in determining Global’s ability to service this contract. [5]

- 19** Paul has developed and patented a new product. He requires finance in order to put the product into production. A venture capital company has offered to finance Paul on the basis that Paul will incorporate his business as a limited company. The venture capitalist will provide all of the funding necessary to commence the manufacture and sale of the new product in return for 51% of the equity in this new company. The venture capitalist will appoint a board member and Paul will also be a director of the company. Paul will sign a five year employment contract with the company.

Paul’s role with the company will be to work on improvements to the original product and to develop new products for sale by the company. In addition to working full-time as an employee, he must patent any new ideas in the company’s name.

The company will be independently valued at the end of its first five years. The venture capitalist will then offer Paul the opportunity to buy its 51% holding for that proportion of the independent valuation plus 20%. If Paul does not take that offer then the venture capital company will retain its shareholding and the question of Paul’s contract will be reviewed by both sides.

- (i) Discuss the benefits of this arrangement to both Paul and the venture capitalist. [10]
- (ii) Discuss the difficulties associated with the valuation of the company’s shares at the end of year five. [5]
- (iii) Recommend the approach that should be taken to valuing the company at the end of year five. [5]

[Total 20]

- 20** Trent makes signs and banners for use in decorating venues for wedding receptions and parties. Until recently, most of Trent's sales were to private individuals who paid for their purchases in cash or by credit card. During June 2013, Trent started to sell its products to a major event planning company, who now buy their signage and banners from Trent and who insist on trading on credit terms.

Trent's directors are delighted at the massive expansion in sales, but they are starting to become concerned about the impact on liquidity. The following information has been extracted from the company's monthly management accounts:

	<i>June 2013</i>	<i>July 2013</i>	<i>August 2013</i>
	£	£	£
Sales revenue			
Credit sales to event company	400,000	850,000	1,213,000
Credit card sales	240,000	250,000	270,000
Cash sales	50,000	60,000	70,000
Total	<u>690,000</u>	<u>1,160,000</u>	<u>1,553,000</u>
Cost of sales	414,000	696,000	931,800
Inventory	358,800	583,742	781,510
Trade receivable from event company	200,000	765,000	1,273,000
Trade receivable from credit card company	360,000	395,161	461,613
Bank	18,423		
	<u>937,223</u>	<u>1,743,903</u>	<u>2,516,123</u>
Trade payables	621,000	898,065	1,052,032
Bank		65,616	62,667
	<u>621,000</u>	<u>963,680</u>	<u>1,114,699</u>

- (i) Analyse Trent's liquidity over the period covered by the extracts from the management accounts. [12]
- (ii) Recommend a suitable course of action for the management of Trent's liquidity. [8]
- [Total 20]

**END OF PAPER**

