

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

27 April 2017 (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.

<p><i>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.</i></p>
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- 1** Which of the following best describes the purpose of a Chinese wall within a securities firm?
- A to preserve anonymity
 - B to prevent conflicts of interest
 - C to prevent theft
 - D to prevent unauthorised access
- [2]
- 2** An option gives its holder the right to purchase 1,000 shares for £1.40 each. The shares were trading at £1.20 when the options were issued. They are presently trading at £1.30. The holder paid £0.10 per share for the option. What is the option's strike price?
- A £0.10
 - B £1.20
 - C £1.30
 - D £1.40
- [2]
- 3** What are the potential implications for debenture holders of an increase in interest rates in the economy?
- A Cash flows from debenture instruments will increase and the value of the debentures will increase.
 - B Cash flows from debenture instruments will increase, but the value of the debentures will remain the same.
 - C Cash flows from debenture instruments will remain the same, but the value of the debentures will decrease.
 - D Cash flows from debenture instruments will remain the same, but the value of the debentures will increase.
- [2]
- 4** Why might buyers be prepared to buy zero coupon debentures?
- A The company may offer exceptional security.
 - B The debentures may be issued at a significant discount.
 - C The debentures may be issued at a significant premium.
 - D Prevailing interest rates may be low.
- [2]

- 5** What is the purpose of the margin on a futures contract?
- A to ensure that the exchange's commissions are paid
 - B to even out the cash flows associated with the transaction
 - C to link the future price to the inherent price of the underlying instrument or commodity
 - D to protect the counterparties against loss
- [2]
- 6** A company's diluted earnings per share is significantly lower than its basic earnings per share. How should that be interpreted?
- A Heavy losses are expected.
 - B The company has a large number of warrants in issue.
 - C The company is a poor investment.
 - D There is an active market in traded options on the company's shares.
- [2]
- 7** A company has identified a loophole in accounting standards that will enable it to overstate its reported profit, although this will be apparent from a close reading of the notes to the financial statements.
- Which of the following is the most likely result of using this loophole?
- A The share price will increase but the price/earnings ratio will be unaffected.
 - B Neither the share price nor the price/earnings ratio will change.
 - C The share price will be unaffected but the price/earnings ratio will reduce.
 - D The share price will be unaffected but the price/earnings ratio will increase.
- [2]
- 8** A company has a low profit margin but a high return on capital employed when compared to its main competitors.
- Which of the following interpretations is most likely to explain this combination?
- A The company's selling prices are at an optimal level.
 - B The company's selling prices are at an optimal level, but the company is spending too much on other operating activities.
 - C The company's selling prices are too high.
 - D The company's selling prices are too low.
- [2]

- 9** A manufacturing company's financial statements are based on historical cost accounting. Which of the following best explains the problems associated with interpreting the company's financial statements during periods of inflation?
- A The cost of inventory consumed and depreciation are both overstated.
 - B The cost of inventory consumed and depreciation are both understated.
 - C The cost of inventory consumed is understated and depreciation is overstated.
 - D The cost of inventory consumed is overstated and depreciation is understated.
- [2]
-
- 10** A company's operating profit is €2 million. Its finance charges were €0.5 million. Shareholder equity is €20 million and long term borrowings are €6 million. What is the company's return on capital employed?
- A 5.8%
 - B 7.7%
 - C 9.6%
 - D 10.0%
- [2]
-
- 11** An engineering company has a rival, Bolt, that it is thinking of buying. Bolt's current market capitalisation is \$800 million.
- Explain whether the engineering company should pay more than \$800 million in order to acquire this company.
- [5]
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- 12** Three actuaries have decided to establish their own consultancy.
- Describe the advantages and disadvantages to the actuaries of operating as a limited liability partnership (LLP) rather than a simple partnership.
- [5]
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- 13** Describe why some individual taxpayers may prefer to receive investment returns in the form of capital growth rather than dividends.
- [5]
-
- 14** Stock exchange rules tend to require companies to announce "bad" news as soon as the events are known. These announcements are sometimes called "profit warnings".
- Explain the purpose of these announcements.
- [5]
-
- 15** Describe why a company might buy back its own shares rather than make a distribution in the form of a dividend.
- [5]

- 16** Explain why the maximum acceptable level of gearing ratio might vary from country to country. [5]
- 17** Explain the relative importance of liquidity and profitability to the shareholders of a quoted company who are analysing the company's financial statements. [5]
- 18** Describe the problems faced by the external auditor in reporting on the fair presentation of financial statements. [5]

- 19** Hort is an actuarial consultancy. Hort has owned a two floor office block for the past 20 years.

Improvements in technology mean that Hort has reached the point where the whole of the upper floor is left unoccupied.

Hort's directors are considering using the free space in the building to launch a new consultancy venture. This would involve taking on new consultants with relevant expertise, as well as equipping the floor with suitable IT equipment.

The initial investment in the IT equipment will be £1.5 million.

Over the next five years, Hort predicts that the fees earned from the new consultancy venture, minus the cash outflows associated with wages and other running costs, will have a net present value of £4.0 million.

Hort's directors believe that they should allow something for the building in deciding whether to proceed with this venture. Four possible arguments have been put forward by four members of the board:

1. The building cost £2.0 million when it was acquired and it has been depreciated by £800,000 since. That leaves a net book value of £1.2 million, of which £0.6 million could be attributed to the upper floor.
2. The cost of the building is a sunk cost and it should not be incorporated into the project appraisal.
3. The upper floor could be sold to a third party for £2.7 million.
4. The upper floor could be rented out over the next five years, with rental income yielding a net present value of £0.9 million.

The debate over the building has been heated because it could affect the decision to go ahead with the project.

- (i) Discuss the logic of each of the four arguments concerning the building. [8]
- (ii) Explain how Hort's Board should decide on the most appropriate treatment of the building. [2]

Critics of the net present value (NPV) technique state that it has a fundamental flaw in that it is possible to justify either the acceptance or rejection of almost any project by manipulating estimates and assumptions in the evaluation of NPV.

- (iii) Evaluate the assertion that this project illustrates this fundamental flaw in the net present value criterion. [10]
- [Total 20]

20 The information below has been extracted from Trent Ltd's bookkeeping records.

Prepare Trent Ltd's financial statements for the year ended 30 September 2016:

- | | | |
|-------|---------------------------------|------------|
| (i) | statement of profit or loss | [10] |
| (ii) | statement of changes in equity | [2] |
| (iii) | statement of financial position | [8] |
| | | [Total 20] |

Trial balance as at 30 September 2016

	£000	£000
Administrative expenses	8,000	
Cash	13,780	
Debenture interest	12,000	
Debenture loan		135,000
Delivery staff wages	10,860	
Delivery vehicle running costs	15,600	
Delivery vehicles – cost	84,000	
Delivery vehicles – depreciation		39,000
Directors' salaries	12,600	
Dividend paid	45,000	
Manufacturing overheads	20,610	
Opening inventory	7,920	
Plant and equipment – cost	271,230	
Plant and equipment – depreciation		145,590
Production staff wages	32,610	
Property – cost	294,000	
Property – depreciation		43,680
Purchases	247,500	
Retained earnings		63,540
Revenue		488,400
Sales staff salaries	35,550	
Share capital		225,000
Trade payables		8,100
Trade receivables	37,050	
	1,148,310	1,148,310

- Closing inventory has been counted and valued at £8,470,000.
- Production staff wages includes £800,000 that relates to rebuilding a wall in the company's property. The £800,000 should be classified as part of the cost of property.
- Depreciation has to be calculated as follows:
 - Property – 2% of cost
 - Plant and equipment and delivery vehicles – 25% reducing balance
- The tax charge for the year has been estimated at £8,450,000.

END OF PAPER