

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

28 September 2016 (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 would be the most significant constraint on the board of a company that wishes to issue additional equity shares?
- A The company has high gearing.
 - B The share price is presently very high.
 - C The shares are presently trading at a discount to their nominal value.
 - D The whole of the authorised share capital has been issued.
- [2]
- 2** Which of the following might make it cheaper to fund the use of an asset through a finance lease rather than borrowing in order to purchase the asset outright?
- A Finance leases are often offered by banks.
 - B Finance leases transfer the risks of ownership to the lessee.
 - C The lessor retains ownership of the asset.
 - D The term of a finance lease may be for less than the asset's useful life.
- [2]
- 3** Why might maximisation of profit be a less acceptable corporate objective than maximisation of shareholder wealth?
- A It is rarely to the directors' advantage to improve profit.
 - B Profit can be a short-term measure of performance only.
 - C Profits can lead to pressure to pay dividends.
 - D The shareholders do not benefit from profit.
- [2]
- 4** Which of the following is an example of an agency problem?
- A It might be difficult to recruit capable directors.
 - B The directors might award themselves excessive salaries.
 - C The share price may decline because of poor sales.
 - D Interest rates may increase the cost of borrowing.
- [2]
- 5** A company has 10 million shares in issue. The company's share price is \$4.00 per share. The directors are considering a one for five rights issue at \$3.50 per share. Issue costs have been estimated at \$800,000. Calculate the expected share price after the rights issue.
- A \$3.85
 - B \$3.92
 - C \$4.62
 - D \$4.70
- [2]

- 6** A project that is under consideration has a net present value of \$100m. This evaluation takes no account of the very unlikely possibility that a natural disaster will cause significant disruption and leave the company exposed to serious losses. It is impossible to insure against this disaster.

Which of the following is the most appropriate response to the threat posed by the disaster?

- A Abandon the project.
- B Describe the risk in an appendix to the project evaluation.
- C Increase the discount rate to compensate for the additional risk.
- D Subtract the expected value of the costs of the disaster from the \$100m net present value.

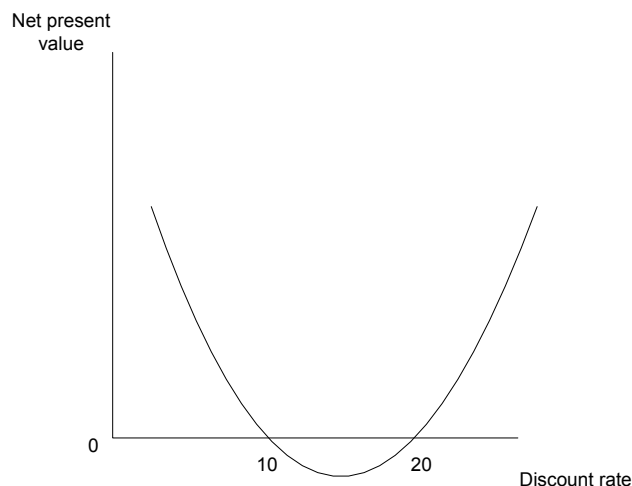
[2]

- 7** A major project has been evaluated using a probability tree, which indicates that the project has a net present value of \$25m. Which of the following describes the most valid interpretation of this result?

- A The project should definitely not proceed.
- B The probability tree should be analysed further to determine the project's risks.
- C The project should definitely proceed.
- D The project's certainty equivalent is \$25m.

[2]

- 8** The net present value of a project has been graphed as follows:



Which of the following statements is correct?

- A The project has a single outflow of cash at the beginning, followed by a series of inflows over its life.
- B The project has a very small initial investment.
- C The project has no internal rate of return.
- D The project has two internal rates of return.

[2]

- 9** A company's operating profit for the year was \$20m, before allowing for interest. Share capital was \$11m, share premium \$7m, revaluation reserve \$2m, retained earnings \$6m, long term borrowings \$8m and trade payables \$4m.

Calculate the capital employed figure that would enable you to calculate the company's return on capital employed ratio.

- A \$27m
- B \$28m
- C \$34m
- D \$38m

[2]

- 10** Which of the following is most likely to occur when a company's trade receivables turnover period, in days, has reduced?

- A A decrease in trade receivables and a decrease in cash.
- B A decrease in trade receivables and an increase in cash.
- C An increase in trade receivables and a decrease in cash.
- D An increase in trade receivables and an increase in cash.

[2]

- 11** Describe why a country might enter into double taxation agreements with other countries. [5]
- 12** A potential customer asserts that it is safe for a company to grant it trade credit because the customer is a wholly-owned subsidiary of a major group of companies. Discuss the validity of the customer's claim. [5]
- 13** Describe the advantages and disadvantages of comparing the profitability of two competing companies in terms of their earnings before interest, taxation, depreciation and amortisation (EBITDA) rather than their profit for the year. [5]
- 14** An investor specialises in identifying small unquoted companies that are in need of finance in order to grow. He invests with a view to holding these shares for the long term, but generally sells once the companies are well established. None of the companies in which he has invested has ever sought a stock market quotation during his period of ownership. Discuss the advantages and disadvantages of this approach to investment. [5]
- 15** Describe the role of the capital markets in disciplining company performance. [5]
- 16** The directors of a quoted company wish to signal their confidence in the company's future. Describe how a scrip issue might be viewed as a sign of confidence. [5]
- 17** Jolt is a quoted company that has pursued a policy of reinvesting profits in order to fund growth. As a result, the company has attracted a body of shareholders whose tax positions tend to favour capital gains over dividends. Jolt's industry faces some difficulties that will inhibit investment opportunities for the next three or four years. Explain:
(a) whether Jolt is likely to change its dividend policy over the period of limited investment opportunities.
(b) how it should communicate this change. [5]
- 18** Derek has a substantial shareholding in a quoted company. The company issued its latest financial statements recently. There is a significant difference between the basic and the diluted earnings per share (EPS) figures. Explain which EPS figure is more likely to be of interest to Derek. [5]

- 19** Planet is a large private company that manufactures engine parts for a multinational car company.

Planet has a large bank loan that was taken out six months ago in order to expand the company's property and upgrade plant and equipment. The loan is secured against the company's property.

The loan agreement specifies that Planet's board must inform the bank immediately if Planet's gearing ratio rises beyond 45% when calculated as debt divided by debt plus equity. In that event, the bank is entitled to immediate repayment of the loan.

If Planet cannot afford to make the immediate repayment then the bank is entitled to force the sale of the company's property, followed by the company's other assets in the event that the funds from the property sale are insufficient.

Planet has recently had its property revalued at a significant loss. The statement of financial position, showing the effects of the revaluation, is as follows:

Planet

Statement of financial position, present day

	<i>Before adjusting for revaluation</i>	<i>After adjusting for revaluation</i>
	<i>\$m</i>	<i>\$m</i>
Non-current assets		
Licences	24	24
Property	160	85
Plant and Equipment	100	100
	<hr/> 284	<hr/> 209
Current assets		
Inventory	80	80
Trade receivables	12	12
	<hr/> 92	<hr/> 92
Total assets	<hr/> <hr/> 376	<hr/> <hr/> 301
Equity		
Shares	90	90
Revaluation reserve	96	21
Retained earnings	12	12
	<hr/> 198	<hr/> 123
Non-current liabilities		
Bank loan	150	150
Current liabilities		
Bank overdraft	17	17
Trade payables	11	11
	<hr/> 28	<hr/> 28
Equity and liabilities	<hr/> <hr/> 376	<hr/> <hr/> 301
Gearing	43%	55%

- (i) Justify why Planet's bank might have regarded the company as being high risk when making the loan. [6]
 - (ii) Discuss the suggestion that it would make better sense for Planet's bank to permit the loan to continue, rather than forcing repayment through the seizure of assets. [7]
 - (iii) Suggest, with reasons, the information that Planet should compile in order to assist it in negotiating a continuation of the loan from the bank. [7]
- [Total 20]

20 The information below was obtained from Trell plc's bookkeeping records as at 31 August 2016.

- (i) Prepare the following financial statements for Trell plc for the year ended 31 August 2016:
- (a) statement of profit or loss [10]
 (b) statement of financial position [5]
- (ii) Describe the advantages and disadvantages of showing the factory at its valuation rather than its depreciated historical cost. [5]
 [Total 20]

Trell plc

Trial Balance as at 31 August 2016

	£000	£000
Bank overdraft		1,008
Dividends paid	129	
Factory – accumulated depreciation		1,980
Factory – cost	4,320	
Investments – short term	102	
Manufacturing equipment – cost	11,340	
Manufacturing equipment – depreciation		2,139
Manufacturing overheads	2,664	
Manufacturing wages	2,880	
Office expenses	1,440	
Opening inventory – finished goods	2,304	
Opening inventory – raw materials	1,332	
Opening inventory – work in progress	1,476	
Overdraft interest	123	
Purchases of raw materials	4,608	
Retained earnings		1,569
Revenue		28,749
Salaries – administrative staff	1,512	
Salaries – sales staff	1,224	
Selling and advertising	1,779	
Share capital		2,160
Share premium		720
Trade payables		1,155
Trade receivables	2,088	
Trade receivables written off	159	
	<u>39,480</u>	<u>39,480</u>

Further information:

- (1) Inventory was counted at 31 August 2016 and was valued as follows:

£000

Raw materials	1,260
Work in progress	916
Finished goods	2,130

- (2) Plant and machinery is to be depreciated by 20% of cost.

The factory is to be depreciated by 2% of cost.

- (3) Just before the year end, Trell plc's factory was professionally valued at £6,000,000. The directors have decided to recognise the gain on revaluation.
- (4) Corporation tax of £2,470,000 is to be provided for the year.

END OF PAPER