INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

2 May 2014 (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 new page.*

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 Which of the following is legally responsible for the commitment owed by a limited company to the company's lenders?

A The company's directors.

B The company's external auditor.

C The company's shareholders.

D The company's treasurer, who negotiated the terms of the loan with the lenders.

[2]

2 Which of the following best explains the problems arising from information asymmetry?

A Directors do not always have sufficient information with which to reach sound managerial decisions.

B Shareholders cannot process all of the information that is available to them.

C Shareholders feel that they do not have sufficient information to evaluate the behaviour of the directors.

D Some shareholders are better informed than others.

[2]

3 Which of the following is most likely to explain a company's decision to issue subordinated debt?

A A lower rate of interest will be available.

B Existing lenders may have the right to prevent the issue of further senior debt.

C Subordinated debt may offer tax advantages.

D The shareholders will feel more secure if the company issues subordinated debt rather than senior debt.

[2]

4 A company wishes to issue convertible stock with a conversion date in five years' time.

Which of the following proposals for the conversion terms is likely to be the most attractive to investors?

A Compulsory conversion to equity shares at the end of year five.

B Investors can choose to convert to equity shares at the end of year five. If they do not convert then their securities will continue as loan stock indefinitely.

C Investors can choose to convert to equity shares at the end of year five. If they do not convert then their securities will continue as loan stock that will be redeemable after a further five years.

D Investors can choose to convert to equity shares at the end of year five. If they do not convert then their securities will be converted to preference shares.

[2]

5 An Australian company entered into a futures contract to exchange Australian dollars for one million US dollars on 31 July 2014. Which of the following will happen if the US dollar strengthens against the Australian dollar?

A The Australian company will have to pay an additional margin to the counterparty.

B The Australian company will have to pay an additional margin to the futures clearing house.

C The Australian company will receive a partial refund of its margin payment from the counterparty.

D The Australian company will receive a partial refund of its margin payment from the futures clearing house.

[2]

6 A quoted company's statement of financial position shows equity shares worth £10m, retained earnings of £20m and non-current liabilities in the form of a £15m nominal loan paying 7% pa interest.

The shares have a total market value of £48m and the non-current liabilities have a market value of £18m.

The company's cost of equity has been determined as 17% and the cost of debt as 8%.

What is the company's weighted average cost of capital?

A 11.60%
B 14.00%
C 14.27%
D 14.55%

[2]

7 A speculator has a policy of investing all of his cash in a single company for a short period in the hope of achieving a capital gain. The speculator is presently looking for a company whose shares have a high beta coefficient.

Which of the following is the most rational explanation for the speculator's desire to identify a high beta security?

A High beta securities tend to increase in value.
B Specific risks can be diversified away and only systematic risks matter.
C The speculator expects stock market prices to strengthen.
D The speculator expects stock market prices to weaken.

[2]

8 A parent company owns a 30% holding in an associate. The associate's profit for the year is £8m. The associate paid a dividend of £6m. How much income will appear in the parent's consolidated statement of profit or loss (or income statement) in respect of this associate?

A £1.8m
B £2.4m
C £6.0m
D £8.0m

[2]

9 A company owns a building that cost €800,000. Depreciation to date on the building is €200,000. The company's directors have decided to revalue the building at its fair value of €950,000. What will be the balance on the company's revaluation reserve?

A €150,000
B €200,000
C €350,000
D €750,000

[2]

10 To whom is the external auditor's report normally addressed?

A the directors
B the lenders
C the shareholders
D the Stock Exchange

[2]

11 A quoted company has raised finance using both debt and equity instruments that are publicly traded. One of the company's major investment projects has failed. As expected, the market value of the equity shares has declined in response to this news, but the value of its debt instruments has remained unchanged.

Explain why it is possible that debt would not decline in value in these circumstances. [5]

12 Ron works in a factory owned by Global Manufacturing ("Global"), a quoted company. Global grants employees who have been employed by the company for more than five years the right to purchase up to 1,000 shares every year at a 5% discount to the share price at the date of purchase. Global's current share price is £4.70 per share.

Discuss the advantages and disadvantages to Ron of taking up the right to purchase shares under this scheme. [5]

13 Discuss the suggestion made by the owner of a small UK business that it is unfair that depreciation is not allowed as an expense for tax purposes. [5]

14 A quoted company is planning to make a rights issue on the basis of one new share for every seven shares currently held. The present share price is £5.20. The rights issue will be priced at £4.50. The directors intend to use the funds raised to fund a project that they are confident will increase the company's present market capitalisation by 20%.

Calculate the expected price per share after the rights issue. [5]

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15 A company's current share price is £2.70. The company has written to shareholders to offer a choice between a cash dividend of £0.50 per share or a scrip dividend of two fully paid shares for every nine shares held.

Discuss the factors that shareholders would have to take into account when deciding whether to take the cash or the scrip dividend. [5]

16 Discuss the difficulties associated with valuing non-current assets at their fair value rather than their historical cost. [5]

17 Discuss the importance of the International Accounting Standards Board (IASB). [5]

18 Discuss the difficulties associated with deciding whether the going concern concept is appropriate. [5]

19 Lomax is a quoted company that manufactures tablet computers. The directors are considering the draft financial statements for the year ended 31 March 2014. These figures have not yet been finalised.

Lomax's accountant has prepared the following analysis for discussion purposes:

	Draft figures for year ended 31 March 2014	*Year ended 31 March 2013, as published*
Earnings per share (pence)	67	78
Price/earnings ratio as at 31 March	16	14
Earnings before interest and tax (£m)	58.2	64.8
Interest (£m)	18	18
Depreciation of property, plant and equipment (£m)	62	67
Amortisation of purchased patent rights (£m)	40	40
Share price as at 31 March (£)	12.48	13.02
Equity shares (50m £1 shares)	50	50

Depreciation is based on the expected useful lives of individual assets. A computerised asset register determines the annual depreciation charge. Lomax's financial statements give the following ranges for the estimated useful lives of property, plant and equipment in the accounting policies note:

- Buildings 20 to 50 years
- Manufacturing equipment 3 to 10 years
- Vehicles 3 to 5 years

The note states that these figures are comparable to those used by similar companies.

On 1 April 2012, Lomax paid £400m for the right to manufacture patented components. The purchased rights grant the right to manufacture these components for 20 years, but the amortisation charge for the years ended 31 March 2013 and 2014 were based on the assumption that Lomax would only manufacture this component for 10 years. The directors are now debating whether that assumption was unduly conservative. The research and development team does not envisage a major change in technology and so Lomax's directors are considering the implications of revising the estimated useful life of the manufacturing rights from 10 years to 15 years, with effect from 31 March 2013. These rights are Lomax's only intangible asset and their accounting treatment will be described in detail in the notes to the financial statements.

The directors were concerned that the share price would decline if they published the financial statements for the year ended 31 March 2014 as they are presently drafted. However, revising the estimated useful life of the manufacturing rights should enhance reported earnings and so the share price should increase.

(i) Calculate Lomax's earnings before interest, tax, depreciation and amortisation (EBITDA) for the year ended 31 March 2014, explaining why investment analysts often use this figure as the basis for measuring financial performance. [5]

(ii) Estimate Lomax's share price under the assumptions that the draft financial statements are published as they are presently stated and that they are adjusted to reflect the 15 year useful life for the manufacturing rights. State any additional assumptions made. [10]

(iii) Discuss the suggestion that Lomax's share price will be increased if the company revises the expected useful life of the manufacturing rights. [5]
[Total 20]

20 Sally has been offered a business opportunity. Her brother Tom is about to go to university and will need to earn a living over the next three years. He has been offered the opportunity to buy a motorboat for £21,000. If Sally buys this boat then Tom will offer fishing trips for clients at weekends. Tom is qualified to operate a small boat that carries paying passengers and there is plenty of demand for this service in their home town.

Tom proposes that he and Sally should prepare an annual income statement and split the cash surplus for the year equally on the last day of each business year, after leaving £2,000 in the business bank account to allow for working capital needs. The motor boat will be scrapped at the end of the third year and the business will be wound up.

Tom knows that Sally cannot afford to invest in this proposal unless it offers an acceptable rate of return. He proposes that she evaluates this opportunity on the basis that she will only invest if it offers her a minimum annual return of 12%.

Sally is interested in this proposal, and has decided to evaluate it in some detail. Her one major concern is that the government is considering changing the law. If they do so, then Tom's business will probably lose its operating licence with the boat becoming worthless. Tom has assured her that he took account of this risk and has already factored it into his suggested return of 12%, which is why he has not suggested a lower rate.

Tom has provided Sally with the following projected income statements:

	Year ended 30 June 2015 £	*Year ended 30 June 2016* £	*Year ended 30 June 2017* £
Revenue (all cash sales)	40,000	50,000	60,000
Fuel, boat repairs and mooring (all cash)	(14,000)	(17,500)	(21,000)
Depreciation	(7,000)	(7,000)	(7,000)
	19,000	25,500	32,000

(i) Calculate the net present value of Sally's cash flows and comment on the results. [8]

(ii) Explain how Sally might use certainty equivalents to evaluate Tom's proposal. [6]

(iii) Discuss the argument that the risks of legal changes should be dealt with by setting a slightly higher discount rate. [6]
[Total 20]

END OF PAPER