INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

5 October 2012 (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 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 Grove is a quoted company that has a dividend yield of 7%. The present share price is £1.40. Grove's directors have announced a one for ten scrip issue and they have made it clear that the dividend per share will not be reduced as a result of the issue. What is the expected value of the shares under these circumstances?

A £1.27
B £1.36
C £1.40
D £1.54

[2]

2 An investor holds a broad portfolio of investments. Which of the following is a systematic risk which may affect the value of her portfolio?

A One of the companies in her portfolio has changed the basis on which it prepares its financial statements, thus lowering reported profits.

B Legislation changes, resulting in one company losing sales and going into receivership.

C Interest rates could rise.

D A new product launched by one of the companies in her portfolio is deemed to be a commercial failure.

[2]

3 A company manufactures car engines and buys in a large number of components from other companies. The company has a choice between two investment projects. It can build a small factory that will manufacture the most expensive components that it currently buys in from third parties. The savings on those components will be very substantial. Alternatively, it can build a large factory that will manufacture all of the components that it currently buys in. There will be a saving on all components manufactured, but the amount saved on the less expensive items will be much smaller. Each investment is equally risky. Which of the following is the most likely when the internal rate of return and net present value from the two projects are compared?

A The small factory option has a higher IRR than the large factory option, and a higher NPV.

B The small factory option has a higher IRR than the large factory option, and a lower NPV.

C The small factory option has a lower IRR than the large factory option, and a higher NPV.

D The small factory option has a lower IRR than the large factory option, and a lower NPV.

[2]

4 Which of the following best describes the reason for a company that has secured debt issuing subordinated debt?

A The cost of subordinated debt will be lower than the secured debt.

B The issue will not affect the rights of existing debt holders.

C There are fewer formalities associated with the issue of subordinated debt than secured debt.

D The issue of subordinated debt will be viewed as a sign of confidence by the markets.

[2]

5 Which of the following accounting concepts is breached when a company recognises a gain in the market value of its property?

A money measurement
B going concern
C cost concept
D business entity

[2]

6 An actuary started a consultancy in 2005 by investing his life savings of £40,000 in the business and borrowing £20,000 from a bank. Since then, the consultancy has grown to the point where it owns an office worth £100,000 and equipment worth £7,000. Trade receivables in the form of work that has been invoiced but not yet paid for total £8,000. The business now has bank loans totalling £82,000 and owes £500 for unpaid bills. What is the value of the actuary's equity?

A £25,000
B £32,500
C £40,000
D £52,500

[2]

7 Which of the following best describes the statement of changes in equity?

A a summary of revenues and expenses for the period
B a summary of the assets, liabilities and equity as at the end of the period
C a summary of changes in capital and reserves attributable to the equity holders
D a summary of movements in cash and cash equivalents for the period

[2]

8 A company had cash sales of £60 million and credit sales of £150 million during its most recent financial year. The company had trade receivables of £40 million and £5 million of sundry receivables for rental income and similar balances at the year end.

How long is the trade receivables turnover period?

A 70 days
B 78 days
C 97 days
D 110 days

[2]

9 Which of the following best summarises the relevance of the income (interest) cover ratio?

A provides shareholders with an important insight into the risks associated with their investment, but is relatively unimportant to lenders

B provides no useful information to either shareholders or lenders

C provides lenders with an insight into the short-term risks associated with their loans, but is relatively unimportant to shareholders

D provides lenders with an insight into the short-term risks associated with their loans and is important to shareholders

[2]

10 Which of the following does NOT explain why historical cost accounting overstates profit during times of inflation?

A The bookkeeping system records historical costs and ignores changes in values.

B The cost of sales figure ignores the increasing replacement cost of inventory.

C Interest is valued at nominal rates rather than real rates.

D Depreciation charges do not reflect increasing replacement costs.

[2]

11 Two actuaries are considering establishing a consultancy business and are considering incorporating as a limited company. The company will have to borrow in order to raise sufficient finance to get started. The actuaries would have to pledge personal guarantees before a bank will grant a loan to their company.

Discuss the benefits of incorporating as a limited company in these circumstances.

[5]

12 Discuss the implications of the threat of a takeover for the behaviour of a quoted company's directors. [5]

13 An investment fund has been established to track the performance of a standard stock market index. The fund manager will construct a portfolio of investments that will perform as closely as possible to the index.

Discuss the advantages of investing in such a fund. [5]

14 Describe the implications for companies if it is not clear whether a significant expense is permissible for tax purposes. [5]

15 A corporate borrower has a loan with fixed rate interest repayments.

Explain why the borrower might wish to arrange an interest rate swap. [5]

16 Explain why quoted companies have to use rights issues when they wish to issue additional shares in order to raise equity. [5]

17 Discuss the potential benefits and drawbacks to be obtained from simulation in the evaluation of an investment project. [5]

18 Explain the difficulties faced by the International Accounting Standards Board (IASB) in setting credible accounting standards. [5]

19 Dayton is a manufacturing company that is planning to expand by acquiring a business that operates in a complementary area. Dayton has identified two potential acquisitions, Echo and Foxton, that both appear to be suitable for consideration. Dayton will acquire only one company.

The following financial indicators have been gathered in order to assist with the decision:

	Dayton	*Echo*	*Foxton*
Revenue	£500m	£250m	£140m
Return on capital employed	18%	14%	11%
Profit margin	26%	22%	33%
Gearing	52%	44%	28%
Price/Earnings ratio	12.3	16.2	14.1

(i) Discuss the impact that the acquisition of each entity would have on Dayton's financial indicators. [10]

(ii) Discuss the suitability of a typical set of published financial statements for the purpose of deciding a price for a controlling interest in a target company. [6]

A subsequent analysis of the two potential target companies indicates that the purchase of Echo will lead to the recognition of a much larger amount for goodwill on consolidation than the purchase of Foxton.

(iii) Explain the significance of this difference between the goodwill figures. [4]
[Total 20]

20 Hatton is a quoted company in the entertainment industry. The company's directors are extremely ambitious and strive to maximise Hatton's rate of growth. The directors have identified the availability of finance as the company's biggest constraint.

The directors have been offered the opportunity to invest in two projects, each involving the development of a new games console. The projects involve competing products and so they are effectively mutually exclusive because there would be no commercial justification in investing in both.

Project A requires an investment of £20 million and has a projected net present value of £80 million. Project B requires an investment of £50 million and has a projected net present value of £200 million. Hatton does not have any spare cash and so it will have to raise finance in order to invest in either project.

The directors of Hatton are unable to decide which of the two investments is better for the company. Each is relatively risky, but the two projects are exposed to virtually the same factors that will determine success or failure and, in that sense, the risks are virtually identical.

Hatton is heavily geared. The company's equity has a book value of £900 million and its debt has a book value of £350 million. Hatton made a large share issue last year and the directors do not believe that they could seek further equity in the short term. The company's debt includes a major loan from a commercial bank that carries a debt covenant under which the loan is repayable in the event that gearing (measured as debt as a percentage of total finance) exceeds 30%.

Hatton's marketing director is keen to proceed with Project B on the basis that it offers the greatest opportunity to enhance the company's share price.

Hatton's chief executive is keen to proceed with Project A on the basis that it will be possible to finance that project without taking the company to the very brink of its debt covenant.

Hatton's finance director has urged caution and recommends refusing both opportunities on the grounds that the only cost of doing so is the opportunity cost. His reasons for this recommendation is that the company is already heavily involved in the games business and it might be better to diversify into other areas of entertainment. In his opinion, refusing the projects will not risk harm to Hatton's share price.

(i) Outline the reasons why a bank might impose a debt covenant such as that affecting Hatton's borrowing capacity. [6]

(ii) Discuss the risks associated with Hatton permitting its borrowings to rise to the maximum gearing level agreed with its bank. [6]

(iii) Discuss the validity of comments made by the finance director that:

(a) the share price will not be harmed by the opportunity cost associated with turning down an investment project with a positive NPV.

(b) the share price could be improved by Hatton diversifying its investment base. [8]

[Total 20]

END OF PAPER