INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

3 October 2011 (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.

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For questions 1–10 indicate in your answer book which one of the answers A, B, C or D is correct.

1 In certain circumstances a stock exchange may grant a quotation for a company even though the company is not making any new shares or existing shares available to the market. This method of obtaining a quotation is known as:

A a placing.
B a prospectus issue.
C a tender issue.
D an introduction.

[2]

2 Hold plc has 20 million shares outstanding priced at £5 a share. A rights issue will allow one share to be purchased for every five shares currently held by shareholders for £3 each. Which of the following is true?

A The number of shares outstanding will fall to 16 million.
B The firm will raise £32 million.
C The stock price will fall to £4.67.
D The company's total value will decrease to £88 million.

[2]

3 Which of the following is NOT a characteristic of Eurobonds?

A They are relatively free from the controls of sovereign government.
B They are traded in an international over-the-counter market.
C They have tax deducted at source.
D They are bearer bonds and are generally unsecured.

[2]

4 Which of the following best describes the effects of an increase in the risk characteristics of a project when evaluating its net present value?

A The discount rate increases and the net present value increases.
B The discount rate increases and the net present value decreases.
C The discount rate remains constant, but the net present value decreases.
D The discount rate decreases and the net present value decreases.

[2]

5 Which of the following long term liabilities would normally carry the highest rate of interest?

A Fixed charge debenture
B Floating charge debenture
C Long term lease
D Unsecured bank loan

[2]

6 If a company has the phrase ‘Public Limited Company’ or the abbreviation ‘plc’ after its name you know:

A that the company must be large.
B that the company must be quoted on a stock exchange.
C that the company must have an established track record.
D none of the above.

[2]

7 The payback method of evaluating a project can lead to the wrong decision being made because:

A it ignores income beyond the payback period.
B the payback period is difficult to calculate.
C the returns in later years are uncertain.
D of the emphasis placed on the interest factor.

[2]

8 A building was purchased for £500,000 and has been depreciated by £20,000. It has recently been revalued at £700,000. What will be the balance on the revaluation reserve?

A £180,000
B £200,000
C £220,000
D £700,000

[2]

9 A company purchased some inventory towards the end of the financial year which remained unsold at the year end. Which of the following statements describes the manner in which this will be reflected in the financial statements?

A An expense in the income statement and a cash outflow in the cash flow statement.

B An expense in the income statement and no effect on the cash flow statement.

C No effect on the income statement and a cash outflow in the cash flow statement.

D No effect on either the income statement or the cash flow statement.

[2]

10 Which of the following best explains why a declining share price is thought to impose some discipline on weak directors?

A The value of the directors' share options will decline.
B The shareholders will withdraw their cash from the company.
C The cost of capital will be depressed.
D The company will be vulnerable to a takeover.

[2]

11 Trade credit and debt factoring are both used to provide businesses with short term finance.

Describe the main features of each. [5]

12 Describe the costs and benefits associated with seeking a stock exchange quotation. [5]

13 A company requires finance in order to expand.

Explain how the company's tax position may affect the decision to use debt rather than equity. [5]

14 Describe the role of the International Accounting Standards Board (IASB) in the regulation of financial reporting. [5]

15 (a) Explain what is meant by the term "associate company".

(b) Explain how associates are treated on consolidation. [5]

16 Discuss the reasons for requiring quoted companies to publish their diluted earnings per share (EPS) in addition to their basic EPS. [5]

17 Explain why it may not be appropriate for management to choose the least expensive source when raising fresh finance. [5]

18 Describe the process by which a holding company will construct a set of consolidated financial statements. [5]

19 Digg is a manufacturing company that is considering the development of a new product. The company has a factory building that is nearing the end of its useful life and that is presently unoccupied. The directors are considering a project that would put the factory to use for the remainder of its life.

Digg is considering the launch of a new product that could be manufactured in the factory space. The following cash flows have been predicted for this project:

Investment in machinery	£2.0m
Demand in first year	500,000 units
Demand in each of years 2–5	1,500,000 units
Selling price per unit	£20.00
Materials cost per unit	£8.00
Additional labour	£800,000 per year

The investment in machinery will occur at the beginning of year 1. All other cash flows will occur at the end of the year in question.

These figures reflect the "most likely" outcome demand for this product. There is a 70% probability that the product will generate this degree of demand.

There is a 30% "least likely" probability that demand will be 200,000 units in the first year. In that case the project will be abandoned.

The labour will be provided by a specialist subcontractor who will require an unbreakable five year contract.

The machinery purchased for this project will be disposed of for a negligible amount that will barely cover the costs of its dismantling and removal.

The product requires a specialised alloy that is difficult and expensive to obtain because it creates toxic by-products. Digg could buy a furnace that would enable it to manufacture the alloy in-house. The furnace would have a five year life and could be located in the factory that will be used for this project. Buying the furnace will reduce the cost of materials by £5.00 per unit. The furnace itself will cost £1.2m, but it will have to be decommissioned on disposal by a specialised recycling company once it has been exposed to the by-products and this will cost a further £1.5m.

(i) Calculate the net present value of the project, using a discount rate of 9%, on each of the following bases:

(a) Digg does not invest in the furnace and the "most likely" demand is achieved.

(b) Digg invests in the furnace and the "most likely" demand is achieved.

(c) Digg does not invest in the furnace and the "least likely" demand is achieved.

(d) Digg invests in the furnace and the "least likely" demand is achieved.

[8]

(ii) Calculate, using your answer to (i) above, the expected net present value of the project both assuming that the furnace is not purchased and that it is. [2]

(iii) Comment on the usefulness of the expected value information produced in (ii) above. [4]

(iv) Discuss the difficulties faced by the directors in this case in deciding whether or not to proceed with this project or to invest in the furnace on the basis of the net present value criterion. [6]

[Total 20]

20 Nation is a company that provides training and consultancy services to small and medium-sized businesses. The company operates through a number of subsidiary companies, each of which is relatively autonomous. Each subsidiary has a designated part of the country in which to operate and the subsidiaries do not compete directly with one another.

The directors of Nation are keen to ensure that each subsidiary maximises its potential. To that end, they have decided to compare the performance of two subsidiaries, North and South. The latest annual reports produced by these companies are as follows:

Income statements
for the year ended 31 July 2011

	North	*South*
	£000	*£000*
Revenue	1,600	2,900
Cost of sales	640	1,015
Gross profit	960	1,885
Advertising and distribution	240	522
Administration	128	116
Operating profit	592	1,247
Interest	24	11
Net profit	568	1,236

Statements of financial position
as at 31 July 2011

	North	*South*
	£000	*£000*
Property, plant and equipment	2,000	2,300
Current assets		
Receivables	160	455
Total assets	2,160	2,755
Equity	1,400	2,515
Non-current liabilities		
Loans	450	200
Current liabilities		
Overdraft	310	40
Total equity and liabilities	2,160	2,755

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(i) Compare the performance of the two divisions in terms of their profitability, liquidity and management of receivables. Your answer should be supported by relevant ratios. [14]

(ii) Describe the limitations of your analysis in (i), explaining why the directors should seek additional information before making changes to the operation of either subsidiary. [6]

[Total 20]

END OF PAPER