EXAMINATION

26 September 2007 (pm)

Subject ST5 — Finance and Investment
Specialist Technical A

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 have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*

3. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*

4. *Mark allocations are shown in brackets.*

5. *Attempt all 8 questions, beginning your answer to each question on a separate sheet.*

6. *Candidates should show calculations where this is appropriate.*

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.

1 (i) State the three main aims of regulation. [1]

(ii) With any type of regulation there is a cost.

(a) Outline the different types of costs involved.

(b) How do these costs impact the overall objectives of the regulator. [5]

[Total 6]

2 You are the financial director of a small private software company. Due to a contract being recently cancelled there is likely to be a short-term liquidity issue where the company cannot meet its creditors for the next three months, after which the financial picture looks healthy. The Chairman of the company is opposed to long-term debt.

You have been asked to provide the Chairman with alternative sources of short-term finance to resolve the impending liquidity issue.

(i) Describe the financing options available to the company. [5]

(ii) Outline the main contract terms that differentiate between the types of borrowing available. [4]

[Total 9]

3 Three companies are intending to raise finance via the debt market.

- Company A — A government backed company which has a history of strong profits and low levels of debt.

- Company B — A public listed company that is well established but has suffered from decreasing sales and has posted losses for the last two years.

- Company C — An internet start up company that intends to sell wedding cakes on-line.

(i) Explain with reasons the credit rating that is likely to be assigned to each of the three bond issues. [2]

(ii) (a) Define the term *expected default loss*.

(b) Explain how this would vary for each of the three companies.

[3]

All three companies decide to issue zero coupon bonds.

(iii) (a) Assuming the yield on a comparable treasury stock is 4.25% p.a., state what yields would be appropriate on a zero coupon bond issued by each company.

(b) Calculate the expected default loss for the first year of each bond, stating any assumptions that you make. [8]

The Government of the country is concerned that the local currency is appreciating too fast and decides to introduce immediate controls on transactions by overseas investors. As a consequence the domestic equity market index has fallen by 15% and treasury bonds are now yielding 5.25% p.a.

(iv) Explain how the yields on the bonds issued by the three companies might change as a consequence of the change in market levels. [6]

[Total 19]

4 A friend has decided that they would like to try to increase their wealth by investing in derivatives. After reading some articles they realise that they do not fully understand some of the terminology and have approached you for help.

(i) Explain the main uses of derivatives. [8]

(ii) For a derivative contract traded on an exchange:

(a) Explain the term *margin*.

(b) Outline the different types of margin payments that are payable.

(c) Explain why a clearing house requires these payments.

[3]

(iii) (a) Explain the difference between a Put and a Call.

(b) Explain the term European and American in the context of options.

[2]

The current share price of XYZ is 60p. Your friend has been offered the following options in XYZ.

Strike Price	*3 Month*	*6 Month*
Call — 75p	5p	10p
Put — 85p	10p	5p

(iv) Given this information, draw the pay-off charts associated with each of these options clearly identifying the price when the option is “in the money”. [6]

[Total 19]

5 (i) Describe the main forms of government policy. [2]

(ii) Outline the main economic indicators which show whether the policies applied by the government have been successful. [2]

To promote growth after a prolonged recession the government has decided to reduce interest rates from 5% to 3%.

(iii) Describe how this move is likely to impact:

(a) individuals
(b) businesses
(c) the economy as a whole

[6]
[Total 10]

6 You are the investment consultant to a £400m pension fund that has a 15% shortfall in assets compared with the national common funding standard introduced by the newly created regulator of pension funds. In addition, the new regulator has insisted that all defined benefit funds have a national common funding level above 105% in seven years' time. One of the trustees has read a newspaper article claiming that more pension funds are investing in hedge funds as a way of meeting their liabilities and the requirements of the new regulator.

(i) (a) Outline the main types of hedge fund that the pension fund could invest in. [2]

(b) Describe the main investment characteristics of a hedge fund. [3]

One of the criticisms of hedge funds is the lack of reliable performance data.

(ii) Explain why there is a lack of credible performance data. [4]

(iii) Explain how the fund could invest in hedge funds alongside other assets and derivatives in order to achieve the national common funding target objectives. [6]
[Total 15]

7 An institutional fund management company listed on the Alternative Investment Market has sought your advice on how it can better manage the operational risks in its business.

(i) Outline the risks that you would seek to address. [3]

(ii) Describe ways in which these risks can be managed. [9]
[Total 12]

8 You have recently been appointed as the financial adviser to a private company. The company wants to provide an initial offering of shares and to be listed on the stock exchange. You have been asked to provide a valuation of the company.

(i) Describe the role of a listings authority. [5]

(ii) State the information you would wish to see in order to provide a valuation. [5]

[Total 10]

END OF PAPER