INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

27 April 2011 (pm)

Subject SA5 — Finance
Specialist Applications

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 both 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 from the approved list.

1 An Economic Advisory Council (EAC) is concerned that levels of both corporate debt and personal debt in the UK are too high and make the economy extremely vulnerable to a downturn in GDP growth.

(i) Discuss the reasons why the EAC holds this view. Your answer should include an explanation as to why high levels of debt make companies, individuals and banks extremely vulnerable to a downturn in GDP growth, and make reference to:

- the main forms of government policy
- the main elements of the UK Government's economic strategy

[12]

The EAC proposes that unsecured debt be discouraged and has suggested to the UK Government that it introduces the following changes:

- For companies, remove the tax deductibility of debt repayments for unsecured debt with an original term of six months or more. The debt repayment will remain as taxable income for the debt holder.

- For individuals, introduce legislation enabling individuals to choose to not repay unsecured loans with an original term of six months or more regardless of the terms in the loan contract. For secured loans, the lender will be able to repossess the security in the event of a default, but would have no other rights against the individual or the rest of the individual's assets.

(ii) Discuss the EAC's rationale for proposing these changes. [12]

(iii) Describe the likely impact of these changes on both companies and individuals. [6]

(iv) Suggest ways in which companies might seek to reduce the impact of the tax change, including how the UK tax authorities might seek to curtail or remove any perceived abuse of the proposed new tax rule. [5]

(v) Describe the impact of the legislative change on banks that lend to individuals. Your answer should include reference to:

(a) A range of different types of loans.

(b) The risks facing the banks when lending to individuals and the likely changes to those risks following the introduction of the new legislation.

(c) Ways in which the banks could seek to control these risks.

[7]

Prior to making its proposal regarding the tax deductibility of unsecured debt repayments for companies, the EAC had considered proposing that all UK companies (not just insurance companies) be required to maintain minimum capital requirements equivalent to those to be introduced for UK insurance companies under Solvency 2.

(vi) Outline the two levels of capital requirements proposed under Pillar 1 of Solvency 2. [2]

(vii) Discuss why the EAC may have decided against proposing that all UK companies be subjected to the Solvency 2 capital requirements. [6]

[Total 50]

2 A wealthy investor proposes to purchase Staple Inn United, a professional sports club. You work for an investment bank and have been asked to assist the investor with his purchase. You have been provided with the following information:

- Staple Inn United's revenues consist entirely of payments from a television company for screening the club's matches.

- It costs £50m per year to run the club.

- There are three leagues in the country. It is the start of a new sports year and Staple Inn United is currently in the top league. At the end of each year, it can be promoted or demoted one league according to its performance. Where relevant, it has a 50% probability of being demoted and a 30% probability of being promoted.

- Television receipts are paid at the start of each new sports year and are determined by the league in which the club plays. Each club expects to earn £100m, £50m and £25m in the top league, league 2 and league 3 respectively.

- Staple Inn United owns a stadium valued at £75m and has no other assets or liabilities.

(i) Calculate the expected present value of television receipts to Staple Inn United over the next four years, stating any assumptions you make. [7]

(ii) Calculate the net present value of the club over the same four years, stating any assumptions you make. [2]

The investor has offered to buy the club for £150m. He does not have sufficient liquid assets and proposes to finance the purchase using debt. Your firm has made three alternative financing proposals:

- borrow £150m from a bank before making the purchase
- take out a £75m mortgage using the stadium as collateral
- securitise four years' television receipts in exchange for £200m

(iii) Compare and contrast the three alternative forms of finance, with specific reference to the likely attractiveness and risks of each proposal to both the investor and the providers of finance. [18]

The investor decides to use securitised television receipts to finance the transaction.

(iv) Outline the basic structure of such a securitisation transaction. [5]

(v) Suggest what additional information the investor should consider before deciding whether to purchase the club. [3]

After two years, the club has slipped to the bottom league and morale is low. It is unlikely that they will be promoted in the foreseeable future. The holders of the securitised bonds are unhappy about the reduced television receipts.

(vi) Suggest how the bonds could be made more attractive to bondholders. [4]

The investor is now considering his exit strategy and proposes to list the club's shares on the London Stock Exchange.

(vii) Explain the “comply or explain” approach to UK corporate governance. [4]

(viii) Outline the principal requirements of the Code on Corporate Governance in relation to non-executive directors. [4]

(ix) (a) Outline two other possible exit strategies.

(b) Explain which exit strategy is likely to be most attractive to the investor. [3]

[Total 50]

END OF PAPER