INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

4 October 2012 (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 all three 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 (i) Describe the Bank of England's inflation target and the approach it takes to managing the target. [5]

Since 2009, the Monetary Policy Committee (MPC) and the Chancellor of the UK Exchequer have started various programmes of quantitative easing.

(ii) Explain what is meant by quantitative easing. [1]

(iii) Discuss why quantitative easing is used. [5]

(iv) Describe with examples the limitations and risks of quantitative easing. [5]

(v) Describe how the Bank of England can directly reduce longer dated yields and flatten the gilt yield curve without expanding its balance sheet or creating new money. [2]

(vi) (a) Explain why the Bank of England may want to take the approach described in (v) above.

(b) Discuss the advantages and disadvantages of this approach relative to quantitative easing.

[5]

(vii) Outline non-market (direct) controls that the Bank of England can use to influence interest rates. [2]

(viii) Describe the likely impact of lowering interest rates on the personal sector, business sector and the UK's balance of payments. [9]

(ix) Explain the four key principles of the UK government's monetary policy framework. [4]

(x) Describe what rating agencies are and their role. [4]

(xi) Explain how a rating agency would assess sovereign risk. [8]
[Total 50]

2 A large and global wholesale bank has recently announced that it has completed the unification of its financial products division. The bank believes that the new structure will:

- allow its customers to raise debt or hedge risks quickly and cheaply under either standard or bespoke terms and conditions; and

- give investors access to the widest possible range of financial debt and derivatives.

The bank believes that it has created a universal financial product platform which allows the customer and the bank to work together to define the financial product that the customer wishes to buy from first principles. The bank will then manufacture the product and advise the customer on both speed of execution and price. The bank believes that its global reach to markets and investors will ensure that all products and risks will be placed and transferred in the cheapest and most efficient way.

(i) Describe how the bank would organise its personnel and departments in order to meet these objectives. Your answer should include reference to the key personnel, their reporting line and the most likely physical locations for the personnel, teams and departments. [5]

The bank claims its approach is unique because the customer decides exactly what financial product it wants to buy rather than picking a product from those that are already available.

(ii) Give reasons why the bank's financial products were managed by separate departments in the past. [5]

(iii) Describe the difficulties that the bank is likely to encounter with its new structure. [3]

The bank has been approached by three customers:

- A large international conglomerate seeking to centralise the wide range and types of debt held by its various subsidiaries.

- A large grain producer seeking to raise new debt to replace ageing equipment and to purchase new farms.

- A small and underdeveloped country's government seeking to raise debt to explore for oil.

(iv) Derive from first principles a potentially suitable financial product for each of the three customers stating any assumptions made. [15]

[Total 28]

3 (i) Outline the current government policy, tax and financial regulation that impacts home ownership in the UK. [3]

(ii) Describe the current and historic financial products which are used to finance homes either directly or indirectly in the UK. [4]

It has been suggested that a set of futures or forwards products based on a home price index would benefit the public, speculative investors and institutional investors.

(iii) Describe the terms and conditions of a potential set of such futures or forwards. [4]

(iv) Discuss the objectives of the likely counterparties trading the futures or forwards. [3]

(v) Describe the products that retail banks might introduce using the new futures or forwards. [3]

(vi) Discuss the likely problems that users of such futures or forwards are likely to encounter. [3]

(vii) State with reasons whether you believe the futures or forwards will trade successfully. [2]

[Total 22]

END OF PAPER