EXAMINATIONS

September 1999

Subject 403 — UK Fellowship General Insurance

Paper One

You must answer this subject only,
you may not attempt another subject in the 400 series.

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *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.*

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

3. *Write your surname in full, the initials of your other names and your Candidate's Number on the front of the answer booklet.*

4. *Mark allocations are shown in brackets.*

5. *Attempt all 7 questions, beginning your answer to each question on a separate sheet.*

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet and this question paper.

In addition to this paper you should have available Actuarial Tables and an electronic calculator.

1 (i) List the factors that need to be taken into account when moving from the expected losses to the theoretical office premium for an insurance or reinsurance policy. [3]

(ii) (a) Make and justify assumptions for such factors for a commercial property insurance policy issued by a direct writer.

(b) Using these assumptions, calculate the theoretical office premium when expected losses are £1 million. You may ignore the impact of insurance premium tax. [7]

[Total 10]

2 List the advantages and disadvantages of assessing statutory solvency requirements using the following methods:

(a) a statutory minimum solvency margin determined as a proportion of written premium or a proportion of claims incurred,

(b) a risk-based capital approach which takes into account the risk profile of the business written and under which the solvency margin is calculated as a proportion of the volatility of past profits. [8]

3 You are an actuary assisting the underwriter of a reinsurance company to price a motor excess of loss policy for £1 million excess of £1 million. You have worked out that the expected losses to the layer will be £450,000 next year.

The reinsurance manager of the ceding company explains that his reinsurance purchasing budget is limited and asks if he could amend the cover so that an annual aggregate deductible of £150,000 is included. (This means that the first £150,000 of losses which would otherwise be recoverable under the policy will not be paid by the reinsurer.)

(i) State the additional information you require to evaluate the impact of the annual aggregate deductible. [3]

(ii) Discuss how you would estimate the revised premium assuming you had all the required information. You may ignore brokerage, commission, investment income and expenses. [3]

(iii) State with reasons the effect on the appropriate profit loading of the change. [2]

[Total 8]

4 Describe the main provisions in the United Kingdom for protecting general insurance policyholders in the event of their insurer not being able to meet its obligations. [5]

5 (i) You are a consulting actuary who has been advising the claims manager of a general insurance company on the feasibility of introducing statistical methods for valuing outstanding claims as an alternative to individual case estimation, which the company currently uses to assess reserves on its private motor and employers' liability business.

Set out the key points you would make in a report to the claims manager outlining the advantages and disadvantages of each method of assessing reserves, the general requirements for the use of statistical techniques, and the problems which might be encountered. [15]

(ii) The company's managing director is newly appointed and has a non-insurance background. He is concerned to know which financial aspects of the company's business are influenced by the claims reserves, and has asked for your views. Draft a reply. [Including 4 for drafting, 8]

[Total 23]

6 A general insurance company intends to launch a range of personal accident products. It is intended that these be sold through direct mailing to "affinity lists" — that is, the insurer will market them to the customers or members of other organisations.

(i) Outline the cover commonly provided under personal accident insurance sold to individuals. [9]

(ii) Discuss the arrangements that will need to be made governing the relationship between the insurer and the affinity groups when selling products in this way. You should consider particularly the financial arrangements. [5]

(iii) Discuss the pricing of this insurance. [9]

[Total 23]

7 Discuss the suitability of ordinary shares as a medium for the investment of the assets of a United Kingdom general insurance company. [23]