EXAMINATION

13 September 2006 (pm)

Subject ST2 — Life Insurance
Specialist 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 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 7 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 A life insurance company sells regular premium unit-linked endowment assurance policies. The insurance company is considering whether to increase the surrender values it pays on these policies.

Discuss the factors it should consider. [7]

2 A proprietary life insurance company has been selling term assurance business for many years. Recently, the company has been losing market share and has decided to re-price the term assurance product.

Describe how the revised premium rates would be determined. [10]

3 (i) Describe the principles appropriate for setting the supervisory reserves for a life insurance policy. [7]

A life insurance company writes regular premium unit-linked endowment assurance policies. Premiums invested in these policies are allocated to Capital Units for the first three years and to Accumulation Units after that. 100% of premiums are allocated to units.

The benefits from this policy are:

- On death — the higher of the combined value of Accumulation and Capital Units (no penalty is incurred on the Capital Units on death) or a specified amount set at outset.
- On surrender — the combined value of Accumulation and Capital Units after any penalty on the Capital Units (see below).
- On maturity — the combined value of Accumulation and Capital Units.

The only charges to the policyholder for this policy are:

- Accumulation Units are charged an annual management charge.
- Capital Units are the same as Accumulation Units except they have a higher annual management charge.
- For the death benefit — unit deductions are made each month based on the age of the policyholder and the excess of the specified death benefit over the unit value.
- On surrender — a surrender penalty is charged as a percentage of the value of the Capital Units. The percentage used decreases the longer the policy has remained in force.

(ii) Describe how the supervisory reserves may be calculated for these policies in a way that is consistent with the supervisory reserving principles. [8]

[Total 15]

4 A life insurance company sells immediate annuity, deferred annuity, endowment assurance, whole life and term assurance policies. The company currently only underwrites its term assurance policies.

(i) Discuss the forms of underwriting that could be used throughout the duration of a term assurance contract and explain why they may be used. [8]

A member of the Board of Directors has heard that underwriting has helped improve the profitability of the term assurance business and has suggested that the company should extend underwriting to its other products.

(ii) Discuss this suggestion. [7]

[Total 15]

5 Describe briefly, suitable life insurance products that might be purchased by the following customers, explaining how they meet the needs of the customer, and whether they would normally be conventional without profits, with profits or unit-linked.

(i) A recently married young couple, who plan to start a large family. [8]

(ii) A financial services company that employs 2,000 people. [7]

[Total 15]

6 A life insurance company writes conventional with profits endowment assurances.

(i) List the components that may be used to determine the asset share of a policy. [4]

(ii) Discuss the issues the company would need to consider when determining the investment return to credit to these asset shares, including any associated tax issues. [9]

(iii) Outline how the asset share could be used to set an appropriate amount for:

- the surrender value
- the maturity value
- the value payable upon death before maturity. [5]

[Total 18]

7 A new life insurance company entered the insurance market three years ago and offers a wide range of conventional without profits and unit-linked contracts. Since launch the company has suffered from very high lapse and surrender rates across the whole range of its contracts. These rates are higher than those anticipated in its pricing bases and higher than those experienced by the rest of the market.

(i) Describe why the company may be experiencing these high rates of lapse and surrender. [8]

(ii) Discuss why the company is likely to be concerned about this. [7]

(iii) Discuss the actions that the company can take to improve its lapse and surrender experience. [5]

[Total 20]

END OF PAPER