

EXAMINATIONS

20 September 2004 (pm)

Subject 422 — SA Fellowship Life Insurance

Paper Two

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. *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.*

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 Actuarial Tables and your own electronic calculator.

- 1** Company XYZ is a large RSA conglomerate listed on the RSA stock exchange. It operates in a number of different sectors, including asset management, provision of loans to individuals and small corporate clients, and private healthcare services.

For many years one of the businesses wholly owned by the conglomerate has been a small subsidiary life insurance company. The subsidiary has sold low volumes of individual term assurance contracts, keyman insurance and regular premium unit-linked savings products. These products have primarily been sold to clients of XYZ's other businesses through the use of mailshots and a small direct salesforce.

A new chief executive of Company XYZ has recently been appointed and is considering a number of possible courses of action.

Discuss the factors that would be taken into account in assessing each of the following courses of action.

- (i) Closing the life insurance company to new business and allowing the existing book to run off over time. [24]
 - (ii) Selling the life insurance company. [12]
 - (iii) Investing in the life insurance company to achieve growth of new business premium income (measured as annual premium plus 10% of single premium) from its current level of R20m to R160m in three years (i.e. doubling the previous year's new business premiums each year). [18]
- [Total 54]

- 2** An RSA life insurance company sells a range of products. However, the only participating products that it offers are the following two types of accumulating participating business:

- A single premium bond written as a whole life assurance, with a guarantee that no market value adjustment will be applied on surrender at the tenth policy anniversary.
- A recurrent single premium retirement annuity, the proceeds of which are used to purchase an immediate annuity at rates current at the date of maturity.

The company has never sold any other type of with profits business.

The company's asset share calculations assume that the annual return on the participating fund applies to all policies irrespective of their duration in force. No charge is made to asset shares in respect of the cost of capital or the cost of guarantees.

- (i) Describe the ways in which the company might use asset share calculations in managing its business. [10]

Discuss the implications of the following proposals.

- (ii) In order to avoid significant fluctuations in the expected amount of annuity benefit, assets backing the retirement annuity policies should move gradually to 100% fixed interest over the ten year period prior to the chosen retirement date. [12]
 - (iii) Policyholders should be charged for the cost of the tenth anniversary guarantee on participating bonds. [16]
 - (iv) Individual policy asset shares should be included on all annual bonus statements. [8]
- [Total 46]

END OF PAPER