

## EXAMINATIONS

15 September 2000 (pm)

### Subject 402 — UK 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. *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 both 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** A large UK mutual life insurance company has written only conventional with profits endowment assurances and without profit immediate annuities through insurance intermediaries for many years. (Insurance intermediaries provide independent financial advice to consumers and can choose from the products of any insurer.)

Following a recent decline in new business, it has decided to set up a direct sales force and use it to market personal pensions, the premiums under which can be invested either on a unitised with profits basis or in a range of internal unit-linked funds. The contracts will include an income withdrawal facility, which will enable the policyholder after retirement to take income through the encashment of units allocated to the policy, rather than by purchasing an annuity.

The opportunity has arisen to purchase an existing direct sales force run by a subsidiary of an overseas financial services company, which has decided to withdraw from the UK market. The subsidiary marketed unit-linked life and pension products invested in a range of funds run by another subsidiary of the overseas company.

As an actuary working for the UK mutual, you have been asked to write a report to its Board of Directors, addressing the following:

- (i) The issues to consider when developing the new range of products, relating to:
- administration of the product [13]
  - investment funds [9]
  - product pricing, and [6]
  - bonus distribution for the unitised with profit fund [14]

You do not need to consider “stakeholder pensions” or give a pricing basis.

- (ii) The relative advantages and disadvantages of purchasing the existing direct sales force, rather than developing a new one. [14]

Draft your report.

[4 marks available for drafting style]  
[Total 60]

- 2** A UK life insurance company offers 10 year endowment savings policies on a unit linked basis payable by monthly premiums.

The National League is a football league of 20 clubs. At the end of each season (August to May) the top five clubs qualify to play in a European cup competition the following season, while the bottom two clubs are relegated and replaced by two clubs from the next division. Football is currently very popular and the company has negotiated an exclusive tie up to sell savings plans to the supporters of National League teams.

The Marketing Director of the company is a keen football supporter and has put forward the following suggestion for a product feature that might encourage additional sales.

The suggestion is that once the premiums in respect of the first policy year have been paid then policyholders who support a National League team (nominated at outset) which qualifies for European football in a particular May will receive a refund of six monthly premiums the following September towards the additional expenses incurred in watching their team in European competition.

The refunds are to be made without cancelling any units under the policy, and will be made for each year that the nominated team qualifies to play in the European Cup.

In order to encourage supporters of less successful clubs to partake, the Director suggests that supporters of a team which does not qualify for any refunds during the term of the contract should receive a payment of 12 months premiums alongside their maturity value.

- (i) Describe the advantages and disadvantages of the proposed product design from the point of view of the insurance company, including a consideration of the potential extra premium loading that the premium refund feature may require. [18]
- (ii) Suggest, with reasons, a basis that might be appropriate, under current conditions, for pricing the proposed product. [15]
- (iii) Suggest changes that might be made to the proposed design to eliminate some of the disadvantages described in (i). [7]

[Total 40]