

EXAMINATION

11 September 2006 (am)

Subject SA1 — Health and Care 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 both 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 You are a consulting actuary undertaking a piece of work for a small life insurer, Healthcover4 Life, which has hitherto specialised in the provision of individual income protection and critical illness policies. Initially the company focused on selling its policies as part of the mortgage process within smaller building societies. More recently it has also distributed policies through intermediaries. All policies sold by the insurer have reserved the right for Healthcover4 Life to change the premium that the policyholder pays.

The Finance Director is concerned at a possible deterioration in claims experience and has asked you to undertake an investigation.

Following a recent Board meeting, the Managing Director has sent you the following email.

To: Actuarial Consultant
From: MD, Healthcover4 Life
Subject: **Claims Deterioration**

Further to your brief received from my Finance Director last week I would like to add my own concerns. The financial management information pack that was circulated shortly before last week's meeting showed the following trend:

Average claim per policyholder:

2001	2002	2003	2004	2005
£200	£245	£255	£290	£350

It would appear that, despite strengthening the reserving basis in 2003 and 2004, our claims experience continues to deteriorate. I am aware from discussions with my counterparts in other organisations that the market premium for this type of business is £300–£350. This seems to indicate that from next year our portfolio will be loss-making.

As part of your remit, can you outline the options available to me to redress the situation? Given that we have the right to change our prices, a premium increase would appear to be a natural course of action. Naturally, I am keen to ensure that we are able to rectify the in-force position without prejudicing our competitive position for new business.

More broadly, in my position I have a keen interest in the implications that this has relating to the efficacy of the control systems in the company. I would welcome your views on this also.

Kind Regards

MD

- (i) Outline briefly whether the MD has cause for concern with regards to claims costs. [2]
- (ii) Outline any additional data you would require and any additional analysis you would need to undertake to assess the claims experience of the portfolio. [10]

- (iii) Describe potential causes of the claims trend, drawing on the information provided in the question. [5]
- (iv) Outline the principles underpinning the FSA, FOS and ABI joint guidance on reviewable long-term protection policies issued in May 2005, coupled with the practical implications of the guidance for insurance companies. [7]
- (v) Suggest possible implications of this guidance on the current situation. [3]

In response to the comment relating to control systems:

- (vi) Outline the key elements of the actuarial control cycle as they would apply to the provider, describing how they interact. [5]

Your investigation shows that there has been a genuine deterioration in claims experience as a result of the new distribution approach.

- (vii) Outline the strategic options available to the MD, together with their implications. [18]
- [Total 50]

2 You are a consultant actuary, who is providing advice to an employer concerning his company's healthcare insurance needs.

The key details for the employer are:

- 800 employees working in factories — mainly based in the UK but with 25 employees overseas
- 200 employees focussed on administration
- 10 management
- 3 directors

The company provides the following benefits:

Pensions — For management and directors, a final salary pension arrangement with a retirement age of 60. The other employees are provided for from a money purchase arrangement with a retirement age of 65.

Death benefits — For all employees, 4 times salary is paid out on death in service.

Sickness pay — On sickness, for management and directors, the company will pay out full salary for 6 months. For other employees, the company will pay out full salary for 3 months and then 3 months on half pay.

No other health related benefits are provided.

- (i) Describe the basic needs that healthcare insurance products meet for individuals and employees. [6]
- (ii) Discuss, with reasons, the types of healthcare insurance products most likely to meet the employer's requirements. [4]

The employer is particularly interested in group income protection business and has asked for further information regarding how these products would generally be priced.

- (iii) Suggest, with reasons, a suitable schedule of benefits for a group income protection quotation for the employer. [3]
- (iv) List the data required by a life office for pricing group income protection business. [5]

The employer is also interested in offering individual income protection business through worksite sales to their work-force.

- (v) Describe the investigations that the insurance company would undertake to determine the price of their individual income protection business. [15]
 - (vi) Describe how group income protection business would be generally priced and how the investigations would differ from those for individual income protection business. [8]
 - (vii) The employer is concerned regarding the cost of group income protection business and has suggested that they retain this risk internally. Discuss the key advantages and disadvantages of this approach. [5]
 - (viii) The employer is also the owner of a Premiership football club and has asked you to consider their healthcare insurance needs. Describe the key factors you would consider and which products would be suitable. [4]
- [Total 50]

END OF PAPER