

EXAMINATION

18 April 2007 (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 all three 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.

<p><i>In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator.</i></p>

1 You are a consultant actuary, based in the country of Actuarialia, undertaking a piece of work for the finance director of a large insurer which provides income protection and critical illness policies on both a group and individual basis. The group policies also include voluntary business, where the employee can choose whether or not they wish to purchase the benefits.

(i) Describe how the insurer's products meet the needs of employers and their employees. [8]

(ii) Describe how group income protection would generally be priced. [8]

In Actuarialia, employees are currently required to retire at age 65. The government of Actuarialia will shortly be introducing legislation which requires that:

(a) employees, if they wish, are able to work until they are aged 70

(b) employers are not allowed to discriminate in respect of age in the benefits that are provided to their employees

The finance director has requested advice on this new legislation.

The insurer is looking at revising the provision of group income protection benefits in the light of the new legislation.

(iii) Discuss the key issues and investigations which need to be considered in determining your response to the finance director regarding group income protection business. [10]

(iv) Discuss the key areas where your answer in (iii) would have differed if you had considered individual income protection business. [4]

Several employers have existing group income protection claims with the insurer which will terminate when the claimant reaches age 60 (five years before the current retirement age). These employers would like to extend these claims until age 65 and have asked the insurer to extend the claims until then.

(v) Describe the investigations that you would undertake to determine a price for extending claims to age 65. [10]

The finance director would also like to consider both individual and group critical illness. Note these products are similar to those offered in the UK market.

(vi) Discuss how your response to (iii) above would differ for critical illness business. [4]

The government is also considering introducing legislation which will make it illegal for insurance companies to discriminate between men and women in their propositions.

(vii) Discuss how this might impact on the providers' products and prices. [6]
[Total 50]

- 2** You are a consulting actuary in the United Kingdom with an extensive knowledge of Actuarial and its health insurance market.

An existing client, the Actuarial Health Insurance Company (AHI) writes business exclusively in its home country of Actuarial. In many respects, Actuarial is similar to the United Kingdom including an extensive state medical insurance scheme. Actuarial has a thriving health insurance industry with a number of local insurers writing private medical insurance, critical illness, income protection and pre-funded long-term care insurance.

There are no international insurers operating in Actuarial. However, there are no domestic reinsurers and a number of international reinsurers provide reinsurance facilities to the local Actuarial health insurers.

In a recent general election, a new government came to power under its Prime Minister, Professor Dalek. Professor Dalek is an expert on foreign exchange markets and was elected primarily on a party platform of solving the long standing shortage of foreign exchange for Actuarial. The Prime Minister has noticed that there is a substantial use of international reinsurance facilities by the domestic health insurers. He has proposed new regulations to apply from 1 January 2008 restricting the amount of reinsurance that can be ceded to a reinsurer to 5% of premiums.

AHI has contacted you and asked how it might cope with the new regulations regarding reinsurance.

- (i) Outline the information you would require from AHI in order to draft your reply to their request. [10]
- (ii) For each of the four health insurances written by AHI namely private medical insurance, critical illness, income protection and pre-funded long-term care insurance, discuss, with reasons, what reinsurance AHI should seek to purchase in future. [10]

The Prime Minister's Office has indicated after extensive lobbying that the limit might be increased from 5% of premiums.

- (iii) List the points your client should include in a letter to the Prime Minister extolling the virtues of being able to reinsure a significant element of a health insurance portfolio. [10]

[Total 30]

3 You work in the actuarial team within a life insurance company. As part of a regular audit process you have been asked to review claims management of the income protection portfolio.

(i) Describe how the claims management approach interacts with the other departments within an insurance company. [5]

(ii) As part of the investigation you have been asked to review the following specific cases.

Case A Claimant is a relatively new teacher who is suffering from a stress related condition. Unable to work as a teacher and is claiming under an “own occupation” definition. Disability counsellor advises that claim is genuine and claimant keen to return to some form of work.

Case B Claimant has been in local press being awarded a prize for being leading scorer in local football league. Has been claiming under an ADL definition.

Case C Claimant has been suffering from a knee injury for 5 months. Is claiming under a linked claims policy condition on a policy with a 12 month deferred period as policyholder was previously absent from work for 15 months with a broken hip. Policyholder is a manual labourer under an “any occupation” definition.

Case D Claimant is unable to undertake any work due to a degenerative heart condition, which was known to the claimant at the time the policy was put in force. The claimant is a member of a group income protection scheme that applies an “any occupation” definition and has a free cover limit in excess of the claimant’s salary.

Comment on the key aspects of each claim together with the options available to manage the claim in payment. [15]

[Total 20]

END OF PAPER