

EXAMINATION

26 April 2010 (pm)

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 before 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 four 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 from the approved list.

1 A large UK health insurer currently sells a PMI product, Product X, to individuals resident in the UK. It is considering launching a new PMI product, Product Y, which will be sold exclusively to UK citizens who are now resident in a specified overseas developed country with a warm climate.

(i) Describe the additional risks to the insurer arising from launching Product Y to which the insurer is not already exposed under Product X. [7]

(ii) Discuss the potential sources of data available for pricing the product. [5]

The finance director is concerned about the possible effects of the product launch on the liquidity and solvency position of the company.

(iii) Explain how the product launch could affect these areas. [6]

[Total 18]

2 A health insurer sells a range of health insurance products, including group flexible benefit schemes. At present these flex schemes do not include a critical illness benefit option.

It is considering introducing an accelerated critical illness flexible benefit option to its standard group flex scheme. Under this option the sum insured would be directly linked to the insured's height / weight ratio at the date of application or policy anniversary. The height / weight ratio is divided into five categories for medical underwriting purposes:

Ideal, Underweight, Overweight, Obese and Very Obese.

It is proposed that a table is published showing the levels of sum insured that could be purchased by a given amount of premium. These sum insured levels are expressed as "cover multipliers". The cover multipliers are expressed as multiples X_t of the cover which would be purchased by the premium under the "Ideal" category, where X_t varies by the underwriting category t . The sum insured would be reviewed at each policy anniversary.

(i) Discuss the advantages and disadvantages of introducing this new critical illness benefit option. [8]

(ii) Discuss how the company would underwrite this benefit and the related potential pitfalls. [5]

(iii) Outline how the cover multipliers could be determined. [3]

[Total 16]

- 3** The marketing manager of a small UK health and care insurer has proposed launching a regular premium long term Mortgage Payment Protection Insurance (MPPI) product. The benefit from this defined term product aims to cover the policyholder's mortgage payments in the event of accident, sickness, disability and involuntary unemployment.

The maximum payment protection benefit under this contract is the lower of £2,000 per month and 75% of the policyholder's normal monthly net income. The maximum payment protection benefit period is 12 months for any single claim event.

- (i) Suggest events that would lead to the termination of an individual's contract. [3]
- (ii) List the exclusions that are likely to be included under this contract. [6]
- (iii) Suggest eligibility criteria that the company might require a customer to meet when applying for this policy. [4]

The decision has been taken to proceed with the product launch.

- (iv) Outline the assumptions that will be needed to value the regulatory liabilities for this product. [7]
- (v) Outline the regulatory capital requirements that will need to be assessed for this product. [3]

One year later, the management board has asked for a financial report in respect of this product.

- (vi) Outline the information that should be included in this report. [7]
- [Total 30]

- 4** The marketing manager of a large UK health and care insurance company has suggested that the company's standalone critical illness product is more expensive than those of its major competitors. He therefore proposes introducing a budget version of the product which will be cheaper and will offer cover for a reduced list of critical illnesses.

- (i) Discuss the factors which the company should consider regarding the potential launch of this product. [28]

The marketing manager has also suggested that in order to reduce costs further there should be no initial underwriting.

- (ii) Discuss this additional suggestion. [8]
- [Total 36]

END OF PAPER