

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

19 April 2016 (pm)

Subject ST1 – Health and Care Specialist Technical

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 six questions, beginning your answer to each question on a new page.*
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 from the approved list.</i></p>

- 1 Describe the main product features of the UK version of a major medical expenses plan. [4]

- 2 (i) State the principles that an insurer should follow when determining an appropriate investment strategy. [2]

A small health and care insurer with a low level of solvency has written only immediate needs annuity business for individuals, covering personal care and residential care costs.

The annuities provide a guaranteed level of income while the annuitant is alive. Half of the policies provide a fixed level of income and half have income that increases yearly, where this increase is linked to the change in a price inflation index for that country. In the event of death, all policies pay a return of premium less the amount of annuity payments already paid (if this value is positive).

(ii) Recommend, with reasons, an appropriate investment strategy for this insurer. [15]

[Total 17]

- 3 A health insurer has sold income protection and critical illness insurance business through a direct salesforce and insurance intermediaries for many years. The insurer owns the buildings that it occupies.
 - (i) Describe how the insurer would perform a full expense analysis. [15]
 - (ii) Explain how the results of the analysis would be used to set expense assumptions for product pricing purposes. [6]

[Total 21]

- 4 (i) List four “major” critical illness conditions and eight “other” conditions that are typically covered by critical illness insurance products. [3]

The individual stand-alone critical illness insurance product currently offered by a health insurer covers what it considers to be a standard set of conditions. The marketing director has suggested that more conditions should be added to the list of cover for new policies.

 - (ii) Explain the characteristics of an illness or condition that would make it appropriate for addition to the list of cover. [5]
 - (iii) Discuss the potential advantages and disadvantages to the insurer of the suggestion. [12]

[Total 20]

5 A health insurer writes individual income protection insurance business.

Currently, the insurer uses financial underwriting at the claim stage.

- (i) Describe how financial underwriting at the claim stage is carried out for this type of business. [3]
- (ii) Explain why it is carried out. [2]
- (iii) Outline a situation where the policyholder might reasonably consider financial underwriting at the claim stage to be unfair. [1]

The product director is considering removing the claim stage financial underwriting, without changing the premium rates.

- (iv) Discuss the potential advantages and disadvantages of this proposal. [10]
 - (v) Suggest actions the insurer could take to mitigate the potential disadvantages. [5]
- [Total 21]

6 The reserves calculated in the most recent supervisory valuation of a portfolio of individual income protection insurance business have increased significantly from those calculated a year ago, in the previous supervisory valuation.

Suggest possible reasons for the increase. [17]

END OF PAPER