

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

24 April 2012 (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 eight 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 from the approved list.</i></p>
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- 1** Suggest reasons why private medical insurance may be purchased. [6]
- 2** A survey has been carried out by a health and care insurer in Actuarial, which suggests that only two-thirds of employers collect sickness absence data relating to their employees.
- (i) Outline the advantages and disadvantages to employers of collecting sickness absence data. [3]
- (ii) Suggest reasons why the insurer carried out the survey. [3]
- [Total 6]
- 3** A health and care insurance company reinsures its critical illness business on an original terms basis. It has set up a process which automatically extracts the data which it has to send to its reinsurer.
- List the additional data that it would have to add to the existing extract if it decided to start reinsuring its income protection business. [6]
- 4** The government of Actuarial uses an incapacity benefit payment system. Under this system, workers who are unable to work due to illness or injury qualify for the payment of a fixed benefit after 26 weeks of incapacity, as defined by the government. The benefit is payable until the first of the following events: the worker recovers, dies or reaches normal retirement age, which is currently age 65.
- Payments under the system have become a serious burden for the State. The government is therefore proposing that the benefits should be discontinued after one year's payment, in any event.
- (i) Discuss this proposal. [6]
- A member of the Actuarial government has claimed that the one year cut-off period would be devastating to some claimants. Two alternative suggestions have therefore been made:
- (a) Lengthen the proposed maximum payment period.
- (b) Drop the proposal to introduce a maximum payment period, but instead strengthen the definition of incapacity and make payment of the benefit subject to tighter controls.
- (ii) Discuss these alternative suggestions. [6]
- [Total 12]

5 A health and care insurer operates a scheme underwriting system. Under this system the insurer provides tailored quotes for group business, based on facts collected about the company involved.

(i) Describe how underwriting differs for a group scheme compared with individual business. [2]

(ii) Explain what is meant by a credibility factor. [2]

Where the group's own experience is not available, the insurer adjusts its standard premium rates based on the industry in which the group operates.

(iii) Explain the adjustments that might be made to a standard set of assumptions for groups in the following areas:

- (a) Religious leaders
- (b) Fried chicken outlets
- (c) Sports centres

[9]

[Total 13]

6 Describe the different types of proportional reinsurance available, indicating the extent to which they would be suitable for a company writing health and care insurance business for the first time. [16]

7 (i) Describe the features of an income protection (IP) product. [6]

(ii) Explain the different definitions of disability that may be used in an IP product, including the relative levels of cover provided. [8]

In the country of Actuarial, health insurers are finding it difficult to sell IP products.

(iii) Suggest possible reasons for this. [7]

[Total 21]

8 In the country of Actuarial, the business environment is being reviewed with a view to making it easier for small businesses to get established. This will include requiring insurers to make it easier for small businesses to obtain group health protection insurance.

(i) Outline the likely health insurance requirements of small businesses. [7]

A health and care insurer writes critical illness, income protection and private medical insurance in Actuarial.

(ii) Explain the issues that might arise for this insurer if it is required to make it easier for small businesses to purchase contracts. [5]

(iii) Outline the actions that the insurer could take to manage these issues. [8]

[Total 20]

END OF PAPER