

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

23 April 2014 (pm)

Subject SA3 – General Insurance Special 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 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.

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
- (i) Give examples of latent claims, and the territories and insurance products affected. [8]
 - (ii)
 - (a) Describe how you would model UK asbestos claims for reserving purposes.
 - (b) Outline approaches that could be used for other latent claims. [20]
 - (iii) Describe why and how you would consider and reflect latent claims in the modelling of the capital requirements. [12]

Company X is a large insurance company, with businesses in the UK and continental Europe. It has grown significantly in recent years through the acquisition of a number of smaller businesses. Company X writes a mixture of personal and commercial lines and holds provisions for latent claims due to significant past exposures, including additional exposures taken on in an acquisition made 12 months ago.

Company X has engaged an external consultant to review the provisions for latent claims. This review has identified a substantial shortfall in the held reserves. The business acquired by Company X two years ago accounts for a large part of the shortfall.

The internal assessment conducted soon after the acquisition indicated that the level of provisions were within a reasonable range. The chief actuary has been asked to conduct an internal review to explain the current situation and its implications for Company X.

- (iv) Describe the factors that might be identified by the review to explain the deterioration in both the newly acquired liabilities and Company X's pre existing liabilities. [6]
- (v) Identify the potential implications and consequences of the identified shortfall for Company X. [6]

Company X would like to explore ways to reduce the level of latent claim liability reserves held on its balance sheet.

- (vi) Explain the different options available to Company X and the advantages and disadvantages of each, including the practical complexities of reducing the liabilities for latent claims. [12]

Having read an article regarding potential health risks of mobile phones, the Chief Risk Officer has concerns regarding potential future latent claims on as yet unearned business.

- (vii) Explain the rationale for not holding a provision for these potential future latent claims. [2]
- (viii) Describe how the emerging risks from these potential future latent claims might be allowed for in Company X's risk, reserving and capital modelling framework. [4]

[Total 70]

- 2** Country X is a financially and industrially developed country located close to but outside of the EEA zone. Currently solvency requirements for insurance companies in Country X are set as a proportion of claims or premiums.

A new system of solvency requirements is being considered based closely on the proposed European Solvency II model.

- (i) Explain the objectives that the solvency requirements might be expected to meet. [4]
- (ii) State the advantages of the current system. [3]
- (iii) Explain the advantages and disadvantages of introducing the new regime. [6]
- (iv) Identify the potential structural and strategic implications of the new regime for an insurance company in Country X. [5]

As part of the proposed new requirements, companies must demonstrate that a robust risk framework is well understood and fully embedded within the organisation.

- (v) Suggest the features of a company's capital model that would be expected in order to meet these requirements. [12]
- [Total 30]

END OF PAPER

