

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

20 September 2018 (pm)

Subject SA3 – General Insurance: 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 must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *You have 15 minutes of planning and reading time before the start of this examination. You may make separate notes or write on the exam paper but not in your answer booklet. Calculators are not to be used during the reading time. You will then have three hours to complete the paper.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all four 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) Define what is meant by an ORSA under Solvency II. [2]
 - (ii) State the main requirements and areas which should be justified in an ORSA. [5]
 - (iii) List the main components of an ORSA and the main documentation expected to support an ORSA. [3]

A monoline European household insurer is considering expanding into motor insurance.

- (iv) Give two examples of non-quantitative information which might be included in any new ORSA, explaining why each is relevant. [2]
- [Total 12]

- 2**
- Country U is a financially developed country located within a free trading zone (FTZ) alongside several neighbouring countries. Until now all insurers in Country U have had to comply with FTZ-wide legislation which sets out the minimum solvency requirements all insurers operating within the FTZ must adhere to.

- (i) Outline the advantages and disadvantages of having consistent legislation across several countries. [5]

Following a vote in Country U it has decided it will no longer be part of the FTZ, to take effect in one year's time.

- (ii) Outline the main practical considerations Country U must address if it is to design its own legislation separate from the FTZ. [8]
 - (iii) Describe the advantages and disadvantages of continuing to comply with the FTZ insurance regulations after leaving the FTZ. [5]
- [Total 18]

- 3** An insurance company is launching a product, known as “Love Insurance”. If a couple marries each other between three and ten years of taking out the policy, the insurance company will pay \$500 to the couple.

The cost of taking out the insurance is \$50, payable when the policy is taken out.

Policies are not underwritten, with any couple able to buy a policy for \$50. The insurer will not sell more than one policy to a couple.

The benefit is only paid if the two people named on the policy marry in the specified period. No benefit is payable if the couple does not marry, or marries within three years of taking out the insurance, or marries more than ten years after taking out the insurance.

For information, the average weekly wage in the country the insurer operates in is \$500, and the annual rate of inflation is 2%.

(i) Explain why the insurer may want to launch this product. [4]

(ii) Define the term “Anti-Selection”. [1]

It has been said that the policy is certain to experience a very high level of anti-selection, and therefore the insurer should not launch the product.

(iii) Discuss whether this is likely to be the case. [8]

It is now four years since the product was first sold. The insurance company is preparing its Generally Accepted Accounting Principles (GAAP) accounts, and is determining the reserves required for this product.

(iv) List the reserves which may be required in respect of this product, defining each reserve listed. [3]

(v) Describe how the reserves required for this product can be estimated. [15]

[Total 31]

- 4 (i) Describe the underwriting cycle. [11]

Market conditions no longer appear to be showing the same historical pattern of the underwriting cycle, with rates simply continuing to soften across most classes over a prolonged period.

- (ii) Suggest with reasons four potential factors which may be causing this. [12]

- (iii) Discuss whether the continued softening of rates is sustainable. [9]

The regulator is concerned that the true extent of rate softening is being understated, and has made two observations:

- At a market level, business plans show lower rate reductions as there is in aggregate a favourable impact from “underwriter actions”.
- At a market level, benchmark price data suggests new business is more profitable than renewal business.

- (iv) Comment on these observations. [7]
[Total 39]

END OF PAPER