INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

30 September 2020 (am)

Subject SA3 – General Insurance Specialist Advanced

Time allowed: Three hours and fifteen minutes

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.

If you encounter any issues during the examination please contact the Examination Team on T. 0044 (0) 1865 268 873.

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1 A weekly national lottery provides prizes on a weekly basis. Along with smaller prizes where fewer numbers are matched, a fixed share of the overall ticket sales is allocated to the jackpot prize. The jackpot prize is shared across all ticket holders matching all six numbers in a draw. The jackpot prize fund rolls over if there are no winners in a week. The number of tickets sold increases with each rollover.

An established private betting company, ABC Ltd, spots an opportunity and decides to offer tickets for half the cost of the national lottery. ABC will match the exact jackpot prize each week but does not offer the smaller prizes for matching fewer numbers. All its tickets are sold online.

(i) Discuss whether ABC should purchase insurance to cover jackpot payments. [4]

ABC decides to approach the managing agency for a Lloyd's syndicate to ascertain the likely cost of jackpot insurance. The managing agency has offered ABC two options:

- a weekly renewable contract whereby the premium depends on both the number of tickets sold by ABC that week and the size of the jackpot
- an open-ended contract that can be renewed following each jackpot win. Under this contract ABC would be committed to paying a weekly premium until the jackpot is won. The weekly premium would depend on the number of tickets sold that week.

(ii) Outline factors that the syndicate's managing agency should consider when pricing these options. [6]

(iii) Recommend, with reasons, which option is likely to be the most appropriate for ABC. [2]

The managing agency's Chief Risk Officer expresses concerns about additional risks of fraudulent claims under the chosen option.

(iv) Comment on these concerns, considering any potential mitigation options. [4]

[Total 16]

2 Worldwide Insurance is a very large insurance company headquartered in the UK but with offices in over 50 countries worldwide. It has expanded rapidly over the last 3 years through acquiring smaller businesses, and writes a comprehensive range of liability insurance classes globally.

(i) Comment on whether Worldwide may be more or less exposed to latent claims than an insurer operating in only one country. [4]

Worldwide has engaged a leading consultancy firm to review its provisions for latent claims. This consultancy's estimates are significantly higher than the estimates from the company's own actuaries (set 12 months' prior to the consultancy's estimates), which were booked by Worldwide in their latest financial statements. As a result of this increased loss estimate, Worldwide is looking to reduce its latent claim exposures.

(ii) Suggest four reasons for the significant difference in estimates. [6]

(iii) Set out two potential options for Worldwide to reduce its latent claim exposures, considering the advantages and disadvantages of each approach. [8]

[Total 18]

3 The insurance regulator has carried out a major review of the personal lines market to assess whether it is operating fairly with regards to:

- consistency of pricing between different policyholder groups
- value for policyholders
- clarity of communication to policyholders.

As part of this review, the regulator has identified that average premiums for policyholders in their first year with an insurer are materially lower than average premiums for policyholders who have been with an insurer for several years.

(i) Suggest possible reasons why this may be the case, including consideration of potential behaviours of both insurers and policyholders. [8]

The extent of the difference in price between new and renewing policyholders varies significantly between different classes of business.

(ii) Determine factors that might affect the materiality of the difference for particular classes of business. [5]

A politician has seen a newspaper article on this review, and has made the following statement at a press conference:

> '*It is clearly unfair that policyholders are being penalised for their loyalty with higher insurance premiums.*'

(iii) Comment on the politician's statement. [5]

The insurance regulator is considering ways in which it could drive a reduction in the differences in average premiums between new and renewing policies.

(iv) Outline potential actions the regulator might take. [5]

The regulator has decided to require insurers to have no more than a maximum 5% difference in average premiums for any class of business between new policyholders and those renewing the same policy for the fifth consecutive year.

(v) Discuss the potential impacts on the insurance market from these proposals. [9]

[Total 32]

4 (i) Define the term ‘Captive’. [2]

(ii) List advantages and disadvantages of setting up a captive. [6]

(iii) Outline the following for product liability insurance:

(a) policy coverage

(b) claims profile

(c) rating factors.

[12]

XYZ Plc is a large and expanding manufacturing company with factories in several countries producing products for a variety of industries and consumers. XYZ is currently reviewing its insurance requirements.

Its Finance Director is particularly concerned at the level of spend on insurance and intends to set up a captive insurance subsidiary to cover some or all of its insurance requirements.

(iv) Suggest with reasons what insurance XYZ might place in the captive and what it might still transfer to the external market. [6]

(v) Outline factors that might affect the capital requirements for XYZ’s new captive. [8]

[Total 34]

END OF PAPER