

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

22 April 2024 (am)

Subject SP1 – Health and Care Specialist Principles

Time allowed: Three hours and twenty minutes

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator.

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

1 Company A is a newly established health and care insurance company operating in Country X. Company A specialises in individual Private Medical Insurance (PMI) products. Company A's existing PMI products provide comprehensive cover, where full reimbursement is provided for all medical costs incurred in hospitals and for any other treatments covered by the product. These are one-year annually renewable products.

Individual PMI policyholders in Country X were previously able to claim tax relief on their premiums. This tax concession was abolished by Country X's government just over a year ago, which resulted in a reduction in Company A's new business volumes.

Company A has now decided to launch a new budget PMI product to help increase its new business.

(i) Discuss the possible advantages and disadvantages of adding a budget PMI product to its product range from Company A's perspective. [6]

The new budget PMI product proves to be successful in increasing new business. Company A's Marketing Director has proposed adding the following features to the budget PMI product to help boost new business sales further:

- Increasing the maximum entry age from 65 to 75
- Extending the policy term from one year to three years, where premiums are guaranteed throughout the three-year term.

(ii) Assess the suitability of the Marketing Director's proposal. [8]
[Total 14]

2 In Country Y, all health and care insurance products have historically been provided solely by Company B, a state-owned health and care insurance company. The government of Country Y recently privatised Company B. Company B is now wholly owned by a large multi-industry company, and the government of Country Y has opened up its health and care insurance sector to other private investors. In order to operate in the newly opened health and care insurance sector, investors will need to set up a health and care insurance company in Country Y and apply to the insurance regulator of Country Y for authorisation.

- (i) Suggest possible reasons why the government of Country Y decided to privatise Company B and allow new health and care insurance companies to operate in Country Y. [7]

Bank C is a large, established banking group in Country Y, providing a wide range of financial services, including current and savings accounts, mortgages, loans and credit cards, to a significant proportion of Country Y's population. Bank C's management have decided to enter the health and care insurance sector by setting up a new health and care insurance company, which will specialise in selling Critical Illness (CI) products.

- (ii) Discuss the advantages and disadvantages for Bank C of entering Country Y's health and care insurance sector to specialise in selling CI business. [8]

The regulator of Country Y has requested that Bank C includes a three-year new business plan, together with solvency projections, as part of its application for authorisation.

- (iii) Outline the process and relevant factors that Bank C should consider in preparing its three-year business plan and solvency projections. [8]

[Total 23]

- 3 Company D is a newly established health and care insurance company operating in Country Z. Company D specialises in Income Protection (IP) business. Over the last few years, Company D has increased its market share significantly.

Company D's expense ratio is defined as follows:

$$\frac{\text{Total expenses (initial, renewal, termination, claim and investment)}}{\text{Premiums earned}}$$

Company D's annual financial statements are showing an upward trend in the expense ratio, which is now above the sector average in Country Z, and the local insurance regulator has expressed concerns about this upward trend.

- (i) Suggest possible reasons why the regulator may be concerned with this upward trend. [2]
- (ii) Suggest possible reasons for this upward trend. [4]
- (iii) Suggest possible actions than Company D could take to improve its expense ratio. [4]

The regulator has been provided with Company D's most recent analysis of expense experience. It further requested that Company D explains how the following expense assumptions were derived for pricing and statutory purposes:

- initial expenses
- renewal expenses
- termination expenses
- claims expenses
- investment expenses.

- (iv) Explain how the pricing and valuation expense assumptions could be derived using Company D's expense analysis. [10]

[Total 20]

4 Company A is a large health and care insurer in Country X, specialising in Long-Term Care (LTC) insurance business. Company A has the largest market share in Country X's LTC insurance sector and is regarded as one of the leading brands in the country. Company A's product range includes both the pre-funded and immediate needs LTC plans.

- (i) Discuss the possible advantages and disadvantages of a pre-funded LTC plan from the perspective of policyholders. [4]

Company A is in the process of assessing the effectiveness of its risk management, governance and control operations.

- (ii) Suggest the possible operational failures and frauds that Company A may encounter in its normal day-to-day operations. [5]

In the past 6 months, Company A has declined a number of claims on pre-funded LTC plan policies. Company A's administration system had identified the policyholders as having already claimed, and regular claim payments were being made to their respective care homes.

The affected policyholders have complained to the regulator about being treated unfairly. The story has also captured a significant amount of attention on Country X's social media, damaging Company A's brand image.

- (iii) Discuss the initial investigations that Company A should undertake. [8]

Company A's initial investigations confirm that the claims records for the affected policyholders were incorrect, due to a combination of human and system errors.

- (iv) Suggest possible actions that Company A may take to:

- address the investigation findings.
- restore its brand image.

[8]

[Total 25]

5 Country Y is a developing country, with a significant proportion of its population on low incomes. Company B is a small health and care insurance company specialising in health and care insurance products that target individuals in work on low incomes.

- (i) Suggest possible actions that the government of Country Y and Company B may take to help improve the country's lower-income groups' access to health and care insurance products. [4]

Company B wishes to sell more new business, and has approached Reinsurer C, a global reinsurance company, for financial support. This support will be in the form of a Financial Reinsurance (Fin Re) arrangement, where Reinsurer C provides a loan to Company B, and the repayments of the loan are contingent on the stream of future profits generated by Company B's future new business.

- (ii) Discuss the potential advantages and disadvantages of this financial reinsurance arrangement from the perspective of Company B. [4]

As part of the negotiation process, Reinsurer C has requested that Company B provide information on how it incorporates climate change into its business management.

- (iii) Suggest possible reasons why Reinsurer C is interested in Company B's climate change strategy. [2]

- (iv) Describe how Company B can allow for the impacts of climate change in its:

- product design.
- pricing.
- reserving and capital management.
- risk management.
- investment.

[8]

[Total 18]

END OF PAPER