

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

18 September 2023 (am)

Subject SA2 – Life Insurance Specialist Advanced

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 A UK life insurance company (Company A) has two without-profits funds and one with-profits fund, and currently produces accounts in accordance with UK GAAP and Solvency II. Company A has recently been purchased by another UK insurance company (Company B), which has one without-profits fund and one with-profits fund. Company B is part of a wider international insurance group ('Group'), which is based overseas.

Company A normally produces actuarial liabilities at quarter end dates (31 March, 30 June, 30 September, 31 December).

As part of the purchase, Company A is required to produce an opening balance sheet as at the purchase date, 15 May, in accordance with the local reporting regulations of the Group.

- (i) Discuss the practical challenges and potential solutions for Company A's actuarial reporting team producing this opening balance sheet. [8]

The purchase of Company A, and the global importance of the overall insurance Group, has resulted in the Group being included on the list of firms that the Financial Stability Board deem to be global systemically important insurers.

- (ii) State the additional requirements that the Group will be required to meet. [2]

In the future, the Group is looking to transfer all policies from Company A to Company B as follows:

<i>Move from</i>	<i>Move to</i>
Company A without-profits fund 1	Company B without-profits fund
Company A without-profits fund 2	Company B without-profits fund
Company A with-profits fund	Company B with-profits fund

- (iii) Discuss the potential benefits to Company B of the transfer. [5]

An independent actuarial expert will be appointed to produce a report to assist the court scheme process for the transfer of the business.

The expert will need to consider the following areas in respect of the transfer of liabilities:

- Policyholder benefits and expectations
- Security of policyholder benefits
- Wider 'treating customers fairly' issues.

- (iv) Discuss the areas the independent actuarial expert report will cover, considering the implications for each group of policyholders. [8]

The Group has observed that both new business volumes and existing business persistency have reduced on pension products in another company (Company C) in the Group. Management believe that the government in that country could do more to incentivise policyholders through tax. Currently, no tax incentives are offered.

- (v) Discuss the implications for both policyholders and Company C of the government offering tax incentives in line with the tax relief on premiums paid into the UK pension products.

[6]

[Total 29]

- 2 Company A is a proprietary life insurance company operating in a territory that falls within the Solvency II regulatory regime. Company A currently sells unit-linked savings products. In the past, it sold with-profits endowments; this product was closed to new business 20 years ago and the number of in-force policies has reduced significantly in recent years.

The following information has been taken from the Solvency II balance sheet for Company A at the end of the previous year:

Paid up ordinary share capital	€4.1 million
Subordinated debt	€5.9 million
Total own funds	€10.0 million
Solvency Capital Requirement (SCR)	€9.0 million

- (i) Calculate, showing your working, the possible range of the Minimum Capital Requirement (MCR). [3]

The board of Company A is concerned about the possibility of supervisory intervention.

- (ii) Explain why the board may have such concerns. [6]

Company B is a proprietary life assurance company that has grown in size over recent years by taking over a number of other life assurance companies.

It has a wide range of products, including unit-linked business and with-profits business.

The board of Company A has now agreed to sell Company A to Company B.

- (iii) Discuss the possible reasons why:
- (a) the board of Company A decided to sell to Company B. [5]
- (b) the board of Company B decided to buy Company A. [4]

Company B has now purchased Company A. The assets and liabilities of Company A have been transferred to Company B. Company B has now calculated the SCR. The SCR is **not** the sum of the SCR of Company B prior to the purchase and the SCR of Company A given above (€9.0 million).

- (iv) Discuss the reasons for this. [6]

Company A administered the with-profits endowments on its own in-house administration system, but outsourced the administration of the unit-linked business to an external company.

Company B operates a number of its own in-house administration systems, some of which were acquired on taking over other companies. It also has outsourced arrangements with a number of external companies.

Company B is considering whether to continue to use the administration arrangements of Company A or to migrate the business onto administration arrangements used by Company B.

- (v) Suggest possible reasons why Company B may choose to **maintain** the existing administration arrangements of Company A or to **migrate** them. [10]

[Total 34]

- 3** A life insurance company plans to launch a 5-year guaranteed equity bond that is linked to a local equity stock exchange index. The bond will be aimed at young professionals.

On maturity, the benefit will be the greater of:

- the single premium.
- the single premium plus the average growth of the index over the duration of the bond.

The company uses the single premium as follows:

- Charges are taken at the outset (after which there are no other charges).
- Part of the premium is invested in fixed-interest bonds to meet the return of premium guarantee.
- The remainder is invested in a call option on the underlying index, with a strike price at the maturity date.

On death within the term, the bond will return the single premium. On surrender before maturity, the bond will return the value of the fixed-interest assets.

- (i) Explain how the company will ensure that it is treating customers fairly. [8]
- (ii) Suggest the key considerations in pricing the product. [8]
- (iii) Describe the major risks faced by the company as a result of offering this product. [12]
- (iv) Suggest controls that the company might put in place to manage the risks identified in part (iii). [9]

[Total 37]

END OF PAPER