

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

9th March 2022

Subject SA2 – Life Insurance

Time allowed: 3 Hours 30 Minutes (14.30 - 18.00 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

- 1. Please read the instructions to examinees sent along with hall ticket carefully and follow without exception.*
- 2. The answers are expected to be India Specific application for the syllabus and corresponding core reading. However, substantially the core reading material is still taken from material supplied by Actuarial Education Company which is meant for UK Fellowship examination. The core reading also contains some material which is India Specific, mostly the IRDA regulation. In view of this, it should be noted that focal point of answers is expected to be India Specific application. However, if application specific to any other country is quoted in the answer the candidate should answer the question with reference to Indian environment.*
- 3. Mark allocations are shown in brackets.*

- Q. 1)** You are an Appointed Actuary (AA) working for a mid-sized life insurance company in India. The Company sells traditional non-participating savings products, protection products both on retail and group platform, through its multi-distribution channel.

The Company has witnessed a surge in claims in the first half of the financial year 2021-22 from the 2nd wave of COVID pandemic. The total claims received during the first half of the year is almost twice the claims received in last fiscal year and had resulted in significant losses. Majority of the excess claims have come from Group Term Life segment.

You have been requested by the Board of Directors to make a presentation on the COVID provision / reserve to be set aside as at the end of September 2021 for expected claims.

- i) Outline the key points that you would cover in your presentation. Your response should cover analysis of claims experience, basis for estimation of COVID provision and underlying rationale around it. (14)

As a result of surge in claims, the solvency position of the Company has dropped from 200% in March 2021 to 160% in September 2021.

- ii) List the various measures / actions that the Company may undertake to improve the solvency position of the Company. (4)

The Management Committee of the Company has proposed to raise subordinated debt in line with IRDAI (Other Forms of Capital) Regulation, 2015 to cushion the solvency position.

- iii) List the various criteria required by above IRDAI regulation for subordinated debt to qualify as 'Other forms of Capital'. (7)

As part of the application to regulator for issuance of subordinated debt, the Company is required to submit projected business plan and solvency position for a period of 5 years.

- iv) Discuss the various parameters and assumptions that would be required for projection of 5 year business plan and solvency position. (14)

Although there is an increase in claims reporting, the Company has registered a positive new business growth during the period. To drive growth further, the Chief Distribution Officer (CDO) has suggested to introduce unit linked product with capital guarantee feature. He has also suggested that major portion of the premium paid be invested in equity market so that policyholder can benefit from potential equity upside while at the same time ensuring their capital is protected.

- v) Outline the key risks in introducing the proposed unit linked plan. (5)

Before filing the product with the Regulator, the AA wants to estimate the cost of providing return of premium guarantee under this product.

- vi) Briefly discuss the method for calculation of cost of guarantee (COG) under this product with reference to Guidance Note 22 of IAI. (6)

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Q. 2) You are the Appointed Actuary of a well-established proprietary Life Insurance Company in India. The Company has been in operations for last 20 years and sells conventional participating savings products, term assurance products, annuities and unit-linked products through its Bank partners, Individual Agents and Brokers across India.

Conventional participating endowments has been the major contributor to the Company's topline. However, the new business premium in this line of business has not been increasing over last couple of years. The Chief Product Officer has come out with an idea for a new conventional participating life insurance product. The proposed key features of the product are:

- Entry age of life assured between 18 years and 40 years, both inclusive
- Fixed policy term of 20 years
- Product would have only single premium with minimum single premium of INR 1,00,000
- Guaranteed death benefit equals to 10 times of single premium
- Regular reversionary bonuses guaranteed to be at least 4% of the single premium for first 10 policy years
- Terminal bonus would be payable at the time of exit of policy

i) Outline the relevant Regulations on the designing of participating life insurance products. (10)

ii) Evaluate the product design suggested by Chief Product Officer. (15)

Chief Investment Officer suggested that the expected maturity benefit under this product can be enhanced if there is no regular reversionary bonuses and surpluses are distributed only through terminal bonuses.

iii) Discuss on the suggestion of Chief Investment Officer. (10)

iv) Describe various operational risks for this Company and the ways to monitor and manage Operational Risk. (10)

Due to the ongoing pandemic, the staffs of life insurance company have been working from home (WFH). The Chief Risk Officer is of the opinion that ongoing pandemic and WFH has led to increase in Operational risk for the Company.

v) Outline how the ongoing pandemic and WFH has led to increase in operational risk for the Company. (5)

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