

Institute of Actuaries of India

Subject

SA2 – Life Insurance Specialist Advanced

For 2024 Examinations

Aim

The aim of the Life Insurance Specialist Applications subject is to instill in newly-qualified actuaries the ability to demonstrate a detailed understanding of:

- the Indian life insurance environment/market. This includes a detailed understanding of the current products sold, the underlying market/customer demand and methods of distribution, as well as the regulatory, professional and fiscal/taxation regime.
- the principles and techniques of actuarial management and control, that are being used in practice within the Indian life insurance market/company.
- the financial, commercial and economic issues and associated risk present in the Indian life insurance market.

Links to other subjects

Subject SP2 Life Insurance Specialist Principles provides the underlying principles upon which this subject is based. It is assumed that students have a good understanding of the principles covered in that. Candidates can expect to be examined in aspects of general principles developed in Subject SP2 as well as in the Indian specific aspects developed in this subject.

Objectives of Assessment of skill level

Exam questions are designed to test the following:

- Knowledge (demonstration of a detailed knowledge and understanding of the topic),
- Application (demonstration of an ability to apply the principles underlying the topic within a given context) and
- Higher Order (demonstration of an ability to perform deeper analysis and assessment of situations. This includes the ability to develop proposals and recommendations utilising actuarial judgement, i.e. taking into account different points of view, comparing and contrasting situations, clearly communicating any limitations and elements of uncertainty in the approach).

In comparison with SP2 'Life Insurance Principles', the assessment of SA2 is looking for candidates to demonstrate a more detailed understanding of the underlying market conditions in India, as well as the ability to apply actuarial techniques and judgement to more detailed and complex problems. In particular to:

1 understand the more complex aspects of actuarial practice within life insurance companies.

- 2 apply the principles of actuarial practice to the management of life insurance under complex scenarios.
- 3 recommend coherent solutions and courses of action in relation to the overall financial management of life insurance companies.

Detailed syllabus objectives: On completion of this subject the candidate will be able to:

- (a) Define the principal terms used in life insurance in India.
- (b) Describe the major life insurance products, in addition to the generic products covered in Life Insurance Specialist Principles subject (SP2), of Indian life insurance companies in terms of:
 - the needs of consumers versus the objectives of the insurer
 - the benefits, guarantees, and options that may be provided
 - the main types of products issued
 - the purpose, benefits and associated risks (including mitigation techniques) of the various products offered

The products (Group and Individual) under this syllabus objective are:

term assurance

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- income protection insurance
- critical illness insurance
- conventional with profits
- accumulating with profits
- · unit-linked
- · index-linked
- · mortgage endowment
- annuities
- variable annuities
- pension
- · Group saving
- Micro insurance
- Health and non-health Riders
- Regulatory Standard products

In addition to above products, candidates are also expected to have a good understanding of the product lines and applicable rules & regulations as detailed in IRDAI Product Regulations, 2019 (both Linked and Non-Linked).

- (c) Describe the effect of the general business environment in India, including the impact on level of risk to the insurer, in terms of:
 - · new business
 - distribution of products
 - the wider competitive environment
 - · the principles of treating customers fairly
 - operational risk
 - · corporate finance
 - outsourcing
 - securitisation
 - · mergers and acquisitions
 - closed funds
 - other forms of capital
 - reinsurance
- (d) Describe how policyholders' reasonable expectations (PRE) might be measured and managed with regard to the main contract types.
- (e) Describe the principles of Indian contract and trust law as they affect life insurance, including reference to IRDAI (Protection of Policyholders' Interests) Regulations 2017, and the Redressal of Public Grievances Rules, 1998.
- (f) Describe the Indian regulatory environment as it affects life insurance companies in terms of:
 - The taxation of the Indian business of life insurance companies and the effect of taxation on the benefits and premiums paid under Indian life insurance contracts.
 - The supervision of life insurance companies/business under the relevant IRDAI regulations with regard to:
 - o the valuation of the assets and liabilities.
 - the returns to be submitted including the ARA, Annual Appointed Actuary's confidential report, transfers of surplus,
 - o solvency capital, Economic Capital, individual capital assessments and transfers of liabilities.
 - Financial/Profit reporting under the IRDAI regulations.

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- Value of New Business and Embedded Value reporting and disclosure under the Professional Standards on Indian Embedded Values.
- The requirements of the professional and regulatory guidance relevant to actuaries practising in or advising the Indian life insurance companies, including the production of Financial Condition Reports.
- Asset -Liability management
- The capital management of a life insurance company, including determining and improving available capital, projecting future solvency, the principles of asset-liability management and the use of derivatives.
- The role and responsibilities of the Appointed Actuary.
- With Profit Committee: requirement and its roles and responsibilities in managing the with profit business.
- (g) Demonstrate the understanding of professional standard: APS/GNs
- (h) Describe internal controls and procedures necessary to enable the financial reporting listed in Objective (f), having regard to efficient management of the business, including accounting conventions and systems.
- (i) Describe the principles of dynamic solvency/Stress testing in terms of:
 - the reasons for projecting solvency
 - the alternative measures of solvency, including risk based capital approaches the ongoing need for capital and the role of the estate.
- (j) Determine the design of life insurance contracts to be marketed in India and appropriate methods and bases for pricing them.
- (k) Describe the management of with profits business, including:
 - the calculation and use of asset shares
 - appropriate ways of determining surplus distribution policy
 - the determination of discontinuance and alteration terms
- (l) Describe how unit pricing, in respect of the internal unit-linked funds of an Indian life insurance company, can be a source of risk.
- (m) Describe the principles of unit pricing in respect of the internal unit-linked funds of Indian life insurance companies.
- (n) Managing investment guarantees: Interest rate Risk and management of the same
- (o) Describe the principles behind the determination of discontinuance terms for life insurance contracts and:
 - Determine appropriate methods and bases for varying the non-linked life insurance contracts of Indian life insurance companies on terms that are not guaranteed.
 - Determine appropriate methods and bases for varying unit linked or index linked life insurance contracts of Indian life insurance companies.
- (p) Describe the impact of credit and counterparty risks and how such risks might be assessed.
- (q) Determine, for the purpose of meeting regulatory requirements, appropriate methods and bases for valuing the liabilities of an Indian life insurance company, taking account of the nature of the assets.
- (r) Determine methods and appropriate bases for assessing the on-going solvency of an Indian life insurance company, bearing in mind the capital requirements of the company.
- (s) Determine appropriate methods and bases for the purpose of assessing the profitability of the existing business of an Indian life insurance company.

- (t) Describe the principles behind managing capital, having regard to the (sometimes conflicting) interests of policyholders and shareholders with regard to the estate, in the following contexts: □ open funds
 - closed funds □ inherited estate
 - transfers of funds (within company, within group of companies, across companies, under mergers/acquisitions, de-mutualisations)
- (u) Describe the principles of asset-liability management, including stochastic approaches, and: □ analyse the asset-liability matching requirements of an Indian life insurance company □ develop appropriate strategies.
- (v) Analyse the reinsurance and underwriting requirements of an Indian life insurance company for the purpose of the efficient management of the business.
- (w) Carry out an analysis of surplus, on either a supervisory or a economic basis, in respect of an Indian life insurance company and use the results to reassess the design of the company's contracts or actuarial base (v) Carry out an analysis of the change in the shareholder value of a Indian life insurance company and use the results to reassess the design of the company's contracts or actuarial bases.

Study Material for Subject SA2:

A - Reading Material by Actuarial Education Co: 2024 Examinations Course Notes

Chapters 1-3, 14-15, 18-19, 21-23 as found in 2024 ActEd course material.

Chapter 4 - General business environment (Material to be supplemented to cover the distribution framework in India covering individual agents, corporate agents, bancassurance, brokers, direct marketing, online distribution)

Chapter 5 - Legislation - Substitute with Indian specific regulations.

Chapter 6 & 7 – Taxation (1) and (2) - substitute with Indian position

Chapter 8, 9 & 10 - Regulatory environment, Solvency Assessment (1) and (2) - substitute with Indian position

Chapter 11 - Professional standards and guidance - substitute with applicable Indian standards and guidance

Chapter 12 – Treating customers fairly – substitute with Indian position

Chapter 13 – Capital management - substitute with Indian position

Chapter 16 & 17 - Profit reporting and Embedded value - substitute Indian position

Chapter 20 - Management of with-profits business - supplement with the Indian scenario

In addition, apart from other natural linkages to SP-2 subject, students are also specifically expected to demonstrate knowledge of areas of unit pricing, reinsurance, underwriting, surrender values and alterations as outlined in SP-2.

- B Core Reading Material for Subject SA2:
- 1. Insurance Act 1938 (and Insurance Laws (Amendment) Act 2015) –

1(i): Section 13

1(ii): Section 22

1(iii): Sections 27, 27a, 27c

1(iv): Section 35

1(v): Sections 40, 40a, 40b

1(vi): Section 41

1(vii): Section 49

1(viii): Section 52

1(ix): Sections 55, 56 1(x):

Sections 64V, 64VA 1(xi):

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Section 112 1 (xii): Section 113

2. Income Tax Act 1961

2(i): Life office Taxation

Section	Detail
44	Computation of Profits and gains of insurance business: Profits and gains of insurance business shall be computed as per First Schedule. Annual average surplus arrived by adjusting the surplus or deficit disclosed by the actuarial valuation as per Insurance Act, 1938 (4 of 1938)
115B	Tax rate: Tax on profits & gains of life insurance business @ 12.5%
115O, 10(34), 80 M	Provisions for Tax on Dividend
10(23AAB)i	Pension Income exempt : Any income of fund under pension scheme is exempt

2 (ii): Policyholder Taxation:

The candidate is expected to have knowledge of latest provisions at the time of examinations

Section	Detail
80C	Life insurance premium: Deduction in respect of life insurance premium, immediate annuity policy premium
80CCC	Pension products: Deduction in respect of contribution to certain pension funds
80CCE	Aggregate deduction under section 80C, 80CCC and 80CCD(1)
80D	Health insurance premium: Deduction in respect of health insurance premium
17(2)(vii)	Employer contribution to superannuation fund
10(10)	Gratuity received by an employee on his retirement under group gratuity product may be exempt
10(10A)	Commutation of pension is exempt
10(10D)	Sum received under life insurance policy is exempt subject to some conditions
10(13)	Any payment from superannuation fund is exempt on death, etc. under Group superannuation product

2(iii): Note on 'Taxation of Life Insurance business - Some Issues' by S P Subhedar

3. IRDA Regulations and Circulars:

- 3(1): IRDA (Appointed Actuary) Regulations2022
- 3(2): IRDA (Actuarial Abstract and Report) Regulations 2016 and subsequent amendments
- 3(3): Circular dated August 2002 from IRDA Appointed Actuary's Annual Report
- 3(4): IRDA (Preparation of Financial Statements and Auditors' Report of Insurance Companies) Regulations, 2002 and subsequent amendments
- 3(5): IRDA (Protection of Policyholders' Interests) Regulations 2017
- 3(7): IRDA (Assets, Liabilities and Solvency Margin of Insurers) Regulations 2016 and subsequent amendments
- 3(8): Redressal of Public Grievances Rules, 1998
- 3(9): Insurance Act, 1938 as amended by Insurance (Amendment) Act, 2002 and Insurance Laws (Amendment) Act 2015
- 3(10): IRDA (Distribution of Surplus) Regulations 2002
- 3(11): IRDA (Insurance Advertisements and Disclosure) Regulations, 2000 and amendments thereto in 2010
- 3(12): IRDA (Registration of Indian Insurance Companies) Regulations 2000 and amendments thereto in 2003, 2008 and 2016
- 3(13): IRDAI (Insurance Brokers) Regulations, 2018
- 3(14): Corporate Governance Guidelines for Life Insurance Companies
- 3(15): IRDAI Circular on filing of Products/Riders for Life Insurance Business dated 04.10.2022 and subsequent amendments
- 3(16): IRDAI (Registration of Corporate Agents) Regulations, 2015 and subsequent amendments
- 3(17): IRDAI (Issuance of Capital by Life Insurance Companies) Regulations, 2015
- 3(18): IRDAI Circular on ALM and Stress Testing, 2012
- 3(19): IRDAI (Scheme of Amalgamation and Transfer of life Insurance Business) Regulations, 2013
- 3(20): IRDAI (Reinsurance) Regulations, 2018 and subsequent amendments
- 3(21): IRDAI (Health Insurance) Regulations, 2016 and subsequent amendments
- 3(22): IRDAI (Linked Insurance products) Regulations, 2019
- 3(23): IRDAI (Non-Linked Insurance products) Regulations, 2019
- 3(24): IRDAI (Investment) Regulations, 2016 and subsequent amendments

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 - 3(25): IRDAI (Obligations of Insurers to Rural and Social Sectors) Regulations, 2015
 - 3(26): Circulars on Economic Capital; Ref: IRDA/CIR/LIF/049/3/2010, dated 11 March, 2010 and 27th December, 2010
 - 3(27): IRDAI Circular on Guidelines on Interest Rate Derivatives; Ref: IRDA/F&I/INV/CIR/138/06/2014
 - 3(28): IRDAI (Micro Insurance) Regulations, 2015
 - 3(29): IRDAI (Expenses of management of insurers transacting life insurance business) Regulations 2016 and subsequent amendments
 - 3(30): IRDAI (Other forms of capital) Regulations 2015 & 2022
 - 3(31): IRDAI(Registration Indian Insurance Companies), Regulations, 2022
 - 4. Guidance notes, APS Published by the Institute of Actuaries of India and reports:
 - 4(i): APS 1 Appointed Actuary and Life Insurance Business
 - 4(ii): APS 2 Additional Guidance for Appointed Actuaries and other Actuaries involved in Life Insurance
 - 4(iii): APS 3 Financial Condition Report
 - 4(iv): APS 4 Peer Review and the Appointed Actuary in Life Insurance
 - 4(v): APS 5 Appointed Actuary and Principles of Life Insurance Policy Illustrations
 - 4(vi): APS 7 Appointed Actuary (AA) and Principles for determining Margins for Adverse Deviation (MAD) in Life Insurance liabilities
 - 4(vii): APS 10- Determination of Embedded Value of Life Insurance Companies incorporated in India and regulated by the IRDA for the purpose of Initial Public offering (IPO).
 - **APS 34: General Actuarial Practices**
 - 4(viii): GN6- Management of Participating Life Insurance Business with Reference to Distribution of Surplus
 - 4(ix): GN22- Reserving for Guarantees in Life Assurance Business

C - Recommended Additional Reading Material:

Note: The following material is suggested as additional reading so as to assist the student to understand the core reading material better. Reading these papers will help the students to understand the subject better and to demonstrate deeper understanding of the subject in their answer. Please note that questions will not be asked directly from the Recommended Additional Reading Material.

- 1. British Actuarial Journal Vol. 1, Part 4, No. 4 October 1995: Asset shares and their use in financial management of a with profits funds by P D Needleman, FIA and T A Roff, FIA Page No. 603 to 670.
- 2. Actuarial Investigations of Life Assurance Offices in India a Retrospective Review By R M Mehta, FIA, FASI.
- 3. Fin Re SIAS Paper 5 October, 1993
- 4. Realistic Reporting of Life Insurance Company Policy Liabilities and Profits: Developments in Anglo American Countries JIS Vol. 121 Part II 1994
- 5. Modern Valuation Techniques SIAS paper 6 February 2001

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- 6. Getting to Grips with Fair Value SIAS paper 5 March, 2002
- 7. Asset Liability Management in the Life Insurance Industry LOMA paper 1993
- 8. Profit, Capital and Value in a Proprietary Life assurance Company JIA Vol. 121 Part II 1994.
- 9. Building a Credible Life Office Model SIAS Paper 1998
- 10. Demystifying Capital management in the Life Insurance Industry SIAS paper 10 October 2000
- 11. Summary and Comparison of Approaches Used to Measure Life Office Values SIAS Paper 16 October 2001.
- 12. Insurance Company Mergers and Acquisitions SIAS paper 15 February, 2000
- 13. The Actuarial Profession Discussion Paper: Equity between with-profits policyholders and shareholders A discussion paper
- 14. SIAS: Longevity over the next decade: What will drive changes to assumptions over the next ten years? March 2023