



Institute of Actuaries of India

Statutory body established under an Act of Parliament

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
+91 22 6243 3333 +91 22 6243 3322



Institute of Actuaries of India

Subject

F4 - Actuarial Theory and Practice of Employee Benefits



Institute of Actuaries of India

Statutory body established under an Act of Parliament

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
+91 22 6243 3333 +91 22 6243 3322

Aim

The aim of this subject is to ensure successful candidates can suitably apply the main principles of actuarial theory and practice relevant to the provision of Long Term Employee benefits and Social Security Benefits -with particular reference to the Indian context.

Syllabus Topics and Expected Learning Outcomes

Introduction

Define the principal terms used in Employee benefits provision in India.

1. Business Environment and Product Landscape

- Outline, understand and explain the specified Employee benefits, how these benefits address needs of employees. (e.g. Pensions, Leaving service lump sum plans, long service awards, superannuation type plans, post-retirement medical plans)
- Outline and explain the legal, taxation and regulatory framework as applicable to Employee benefits and be able to apply how that influences Employee benefits and their design, financial and risk management.
- Describe the various stakeholders in the landscape and explain their role as applicable to the Indian Employee benefits landscape (e.g. State, Employers, Employees, Trustees, Regulator)
- Apply the principles and practices of the Indian Employee benefits landscape to specific situation such as State provision, company transactions e.g. merger and acquisition or wind up
- Outline, understand and explain the social security plans with particular reference to the Indian context.

2. Regulatory and Professional environment

- Describe and apply the requirements of Actuarial Practice Standards and guidance relevant to actuaries practicing in Indian Employee Benefits space.
- Have a knowledge of, and apply, the broad legal, taxation and regulatory framework as applicable to Indian Employee benefits, including set up of Income Tax recognised Trusts
- Knowledge of, and be able to apply, specific provisions of Income Tax Rules and Accounting Standards covering relevant aspects of Employee benefits business



Institute of Actuaries of India

Statutory body established under an Act of Parliament

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
+91 22 6243 3333 +91 22 6243 3322

- Describe the Actuarial Practice Standards and guidance relevant for actuaries involved in designing and valuation of social security plans

3. Benefit Design and financing

- Outline the main determinants of an Employee benefit structure that meet the needs various stakeholders in the value chain and advise on an appropriate design for a product given a situation
- Discuss the relative merits of different benefit designs against a variety of attributes and for a situation, given the various stakeholder's interests and regulations in India.
- Outline the considerations in determining appropriate benefits in a context of state provision, as compared to an employer sponsored benefit.
- Explain the impact of various benefit designs in the context of coverage, timing and incidence of benefits, financing and risk management of these benefits
- Benefits areas to cover (not limited to...)
 - ✓ State pensions (universal or voluntary)
 - ✓ Occupational based pensions -defined benefits
 - ✓ Post-retirement medical plans
 - ✓ Occupational long service based benefits
 - ✓ Occupational Performance Rewards like Share Based Plans
 - ✓ Collective Defined Contribution Plans
- Discuss the methods and principles of setting terms and their implications on wider issues, related to employee option benefits such as transfer values, commutation, early/late retirement factors
- Discuss and apply the principles behind the determination of discontinuance benefits in respect of benefits from a funded occupational pension scheme in India (in particular).
- Describe the ways in which sponsors in India (in particular), and in general, may be able to fund the benefits to be provided and where appropriate the considerations in setting up a separate funding vehicle e.g. Trusts
- Describe methods and principles of setting up separate funds for financing benefits and apply that knowledge in a given circumstance and the Indian landscape
- Discuss the factors relevant for determining a suitable design for social security plans with particular reference to the Indian context.



Institute of Actuaries of India

Statutory body established under an Act of Parliament

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
+91 22 6243 3333 +91 22 6243 3322

4. Identification, Assessment and Management of Risks

- Identify and assess the various sources of risks arising from an Employee Benefit Plan
- Describe and apply the considerations of the Sponsor covenant in design, financing and risk management of an employee benefit.
- Demonstrate the application of insurance and other such finance solutions for the Indian Employee benefits e.g. bulk annuitization, death benefits and their impact on contributions, cost and stakeholder priorities.
- Demonstrate the principles and application of asset-liability matching as a risk management technique for Employee benefit Plans in India.
- Describe suitable investment allocation and strategies appropriate for a given situation

5. Setting Assumptions and Building Valuation Models

- Describe the main purposes and relevance of different valuation methods for Employee benefits and how they are applied for purposes of setting contributions, level of funding, corporate transactions, funding and financial reporting requirements
- Recommend different valuation models and assumptions for decision-making purposes in specific situations for Employee benefits.
- Discuss the different methods and principles of setting pace of contributions of benefits given a particular situation and to compare contrast them in terms of their impact on timing of contributions, security of benefits, risk management and meeting needs of stakeholders
- Discuss the principles of different pay out phase methods for various benefits and in particular how that applies in the post-retirement phase.
- Outline the process, data required and setting of assumptions required to perform different types of valuations given specific situations and benefits.
- Calculate funding levels and contributions rates and use them to recommend suitable course of actions to stakeholders given specific situations and benefits
- Describe the main purposes and relevance of different valuation methods for Social Security Plans and how they are applied for purposes of setting contributions and assessing level of funding



Institute of Actuaries of India

Statutory body established under an Act of Parliament

Unit No. F-206, 2nd Floor, F Wing, Tower II, Seawoods Grand Central,
Plot no R-1, Sector 40, Nerul Road, Navi Mumbai - 400706
+91 22 6243 3333 +91 22 6243 3322

- Discuss the considerations relevant for setting assumptions and valuation models in a defined contribution environment

6. Experience Analysis

- Describe and identify the potential sources of surplus or deficit
- Outline the process, data requirements to conduct experience analyses of employee benefits given a specific benefit
- Outline the process, data requirements to conduct an analysis of surplus/deficit
