ACTUARIAL SOCIETY OF SOUTH AFRICA

Subject F108
Health, Social and Employee Benefits Fellowship Principles Subject

For the 2025 Examinations

October 2024

Aim

The aim of F108 – Health, Social and Employee Benefits Fellowship Principles subject is to instill in successful candidates the ability to apply, in simple situations, the principles of actuarial planning and control needed for the operation on sound financial lines of providers of health, social and employee benefits.

Links to other subjects

The foundation and intermediate technical subjects provide principles and tools that are necessary in this subject.
Subject A111— Actuarial Statistics: provides a basic grounding in statistics.

Subject A112 — Business Economics: provides some of the macro-economic context.

Subject A212 — Risk Modelling and Survival Analysis: covers some stochastic models used in this subject.

Subject A213 — Life Contingencies: introduces students to the concept of benefit schemes.

Subject A214 — Actuarial Economic Modelling: introduces students to important reserving concepts such as run off triangles.

Subject A311 — Actuarial Risk Management: covers the general underlying principles affecting all specialisms.

Subject F201 — Health and Care Specialist Applications: the aim of the Health and Care Specialist Applications subject is to provide successful candidates with the ability to apply knowledge of the South African health and care environment and the principles of the actuarial practice in the provision of health and care benefits in South Africa.

Subject F204 — Retirement and Related Benefits Specialist Applications: uses the principles in this subject to solve complex problems, produce coherent advice and recommendations within a specifically South African context.

Syllabus Objectives

(a) Define the principal terms used in the provision of health, social and employee benefits.
(b) Describe how health, social and employee benefits can be provided by the state and private sector and on a group and individual basis, specifically for the following:

i) Private medical insurance;
ii) Critical illness insurance;
iii) Long-term care insurance;
iv) Major medical care;
v) Retirement and group risk benefits;
vi) Other employee benefits;
vii) Other (social) benefits; and

viii) Other state-provided benefits.

(c) Explain the concepts of equity, solidarity, mutuality and risk sharing in health, social and employee benefits.
(d) Identify and describe the stakeholders in the provision of health, social and employee benefits, specifically:

i) Explain the role, motivations and responsibilities of the following stakeholders in terms of public benefit provision:
   (1) Taxpayers;
   (2) The state;
   (3) The public;
   (4) The private sector;
   (5) Healthcare providers; and
   (6) The actuary.

ii) Explain the role, motivations and responsibilities of the following stakeholders in terms of private benefit provision:
   (1) The employer;
   (2) The sponsor;
   (3) The member;
   (4) Healthcare providers and managed care organisations;
   (5) The trustees;
   (6) The state;
   (7) The regulator;
   (8) The actuary;
   (9) Trade unions; and
   (10) Other service providers, including auditors, advisors, administrators, insurers, investment managers, human resource specialists and reinsurers.

iii) Explain how a public-private partnership may be used to deliver benefits.

(e) Discuss different types of health, social and employee benefits systems, their appropriateness for different circumstances and the implications for various stakeholders. In particular:

i) Describe the various multinational models that are used to describe benefit provision and funding;
ii) Explain the components of a well-functioning healthcare system, including:
   (1) Classification of primary, secondary and tertiary care; and
   (2) Key supply-side providers
iii) Explain the considerations in defining benefit priorities.

(f) Discuss the demographic influences which affect the demand for health, social and employee benefits, in particular:

i) The main types of population structures;
ii) The implications of different types of population structures on the provision of publicly funded benefits in terms of both asset and liability effects;
iii) The causes and trends relating to ageing populations and the impact of ageing populations on benefit systems; and
iv) The impact of health shocks on population structures and the impact on benefit systems.

(g) Discuss the environment in which health, social and employee benefits are provided, including but not limited to:

i) Regulatory and taxation regimes;
ii) Professional guidance;
iii) Economic and political influences;
iv) Disease burden;
v) Medical advancement;
vi) Technology; particularly for risk management, data and modelling; and
vii) Distribution channels.

(h) Describe the risks that affect the provision of health, social and employee benefits; in particular the categories of:

i) Market;
ii) Credit;
iii) Liquidity;
iv) Business, including insurance;
v) External; and
vi) Operational risk.

(i) Describe how the risks identified in (h) can be managed including the impact and implications for various stakeholders in the provision of the benefits described in (b), with particular reference to:

i) Risk transfer, including reinsurance;
ii) Risk reduction, including for example in investments and product or benefit design; and
iii) Other risk management techniques.

(j) Discuss the options available for the financing and funding of health, social and employee benefits; in particular:

i) Identify and describe the financing options available to the State, employer, member and sponsor and identify the risks inherent in each;
ii) Outline the various reasons for valuing liabilities and the implications for the valuation basis;
iii) Discuss the main funders of healthcare and the main healthcare funding models;
iv) Describe and apply the main funding methods which can be used by a defined benefit fund; and
v) Describe how funds can ensure that they have sufficient funds to meet the expenses of the fund and other unforeseen cash flows.

(k) Design suitable benefit plans to meet the needs of various stakeholders, and assess the design outcome and suitability of various benefit designs, in particular:

i) Assess designs in terms of their risk transfer and management and hence their expected outcomes for various stakeholders;
ii) Analyse and calculate the cost of employment related benefits which form part of the remuneration package;
iii) Identify the needs of various stakeholders and propose benefit solutions that meet those needs; and
iv) Identify and describe the risks addressed or created by applying various policy levers including, for example, fee caps, standardised benefit designs, incentives and benefit minima and maxima.

(l) Discuss the use of investments in health, social and employee benefits, and in particular:

i) Describe the principles of investment underpinning health, social and employee benefits;

ii) Describe how an Asset/Liability Model (ALM) can be constructed, and how such a model can be used to determine an appropriate investment strategy;
iii) Describe the options available to savings vehicles in developing appropriate investment strategies with or without individual investment choice; and
iv) Discuss the considerations an individual would need to take into account when developing an individual investment strategy.

(m) Understand the importance of financial reporting in health, social and employee benefits and in particular:

i) Analyse and interpret relevant financial statements and actuarial valuations, including solvency margins and solvency assessment.
ii) Understand the principles of performing valuations. This objective covers:
    (1) Risk-based capital techniques;
    (2) Risk-based capital, explicit margins and strength of basis;
    (3) Active vs passive approaches to valuations; and
    (4) The interplay between the strength of the supervisory reserves and the level of solvency capital required.
iii) Describe the process of completing an actuarial valuation, considering its purpose. This objective covers:
    (1) Statistical vs case estimates;
    (2) Setting assumptions;
    (3) Consistent valuation of assets and liabilities;
    (4) Market consistent valuations; and
    (5) Sensitivity analysis.

(n) Describe the assumptions that are crucial to actuarial work in this field such as pricing, contribution setting and valuations, including but not limited to:

i) Morbidity;
ii) Mortality;
iii) Persistency;
iv) Claim amount;
v) Expenses;
vi) Inflation;
vii) Investment return; and
viii) Profit requirements.

(o) Describe the principal modelling techniques appropriate to health, social and employee benefits, including data implications. This includes:

i) Objectives and basic features of a model;
ii) Uses of models;
iii) Multi-state modelling;
iv) Comparison of formula and cashflow approach;
v) Sensitivity analysis;
vi) Deterministic and stochastic models;
vii) Outstanding claim provision;
viii) Generalised linear models; and
ix) Risk adjustment and risk monitoring techniques.

(p) Describe the principles by which experience is monitored as the last step of the actuarial control cycle, including:

i) Reasons for monitoring and use of results, including the analysis of surplus and embedded value profit;
ii) Data required; and
iii) The process of carrying out various experience investigations including those into:

(1) Participation rates;
(2) Withdrawal and state-transition rates;
(3) Mortality;
(4) Morbidity;
(5) Expenses;
(6) Investment performance;
(7) Salary inflation; and
(8) Healthcare cost inflation.

End of Syllabus