



Subject F205

Finance And Investment Applications

Fellowship Applications Syllabus

For the 2019 Examinations

October 2018

The syllabus is up to date with industry developments as at the end of May in the year preceding the publication of the syllabus. However, students attempting F2 subjects should also have knowledge and be aware of topical, relevant and current issues, as these may also feature in the examinations.

Aim

The aim of the Investment Applications subject is to instill in candidates the ability to apply knowledge of the South African investment environment and the principles of actuarial practice to the selection and management of investments appropriate to the needs of investors.

Links to other subjects

Subjects F105 — Finance and Investment Principles and A311 — Actuarial Risk Management: provide the underlying principles upon which this subject is based.

Newly qualified actuaries can expect to be examined in aspects of general principles developed in these subjects as well as the South African specific aspects developed in this subject.

Objectives

On completion of this subject the newly-qualified actuary will be able to:

(a) Demonstrate a knowledge of the commercial and economic environment.

- (i) Demonstrate a knowledge and understanding of the characteristics of the principal investment assets and the markets in such assets with particular reference to the needs of a South African investor.
 1. Demonstrate a knowledge and understanding of the following asset classes and markets relevant to a South African investor:
 - *listed equities,*
 - *fixed interest,*
 - *derivatives,*
 - *Infrastructure assets, private equity and venture capital,*
 - *commodities,*
 - *asset backed securities,*
 - *hedge funds.*
 2. Outline the processes of dealing, transfer and settlement processes in the main South African equity, bond and derivative markets.
 3. Outline the differences in the processes of dealing, transfer and settlement in the main foreign equity, bond and derivative markets of interest to a South African investor.
 4. Indicate the likely levels of charges, expenses and dealing spreads for an institutional investor in the main South African and foreign securities markets.
 5. Outline the main features of the structures of the Frontier Market economies, including the SADC states and other African economies, and outline the main features of their capital markets.

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6. Outline the main features of the structures of the Emerging Market economies and the main features of their capital markets.
 7. Outline the main features of the structures of the economies of the United States, Europe (including the United Kingdom) and Japan and China, and outline the main features of their capital markets.
 8. Discuss the key principles of corporate finance including capital structure and financing, and how these relate to different asset classes.
- (ii) Describe the construction and the principal features of the following investment indices.
1. Demonstrate knowledge of the international investment indices that may be relevant to a South African institutional investor.
 2. Demonstrate knowledge of the FTSE/JSE Africa Index Series and other indices published by the JSE.
 3. Demonstrate knowledge of the JSE Fixed Income Index Series.
- (iii) Describe the main features of the historic behaviour of markets and indices and discuss their relationships to each other and to price and earnings inflation.
1. Outline the historical behaviour of the Johannesburg, London, New York and Tokyo stock markets, government bond markets and money markets and the main reasons for this behaviour.
 2. Outline the recent historical behaviour of the emerging equity markets in aggregate and the main reasons for this behaviour. Contrast this with the behaviour of the main developed markets.
 3. Demonstrate knowledge of the principal drivers of the South African economy.
 4. Discuss the expected long-term returns on different asset classes.
- (iv) Discuss the legal framework and ethical issues relating to investment management and the securities industry in South Africa.
1. Demonstrate knowledge of the law relating to investments in South Africa.
 2. Describe the roles of the Financial Services Board, South African Reserve Bank and the National Prosecution Authority in regulating investment in South Africa.

3. Discuss the ethical criteria to be applied by investment managers in South Africa.
 4. Describe the role of the Association for Savings and Investment SA and its influence on the investment management industry in South Africa.
 5. Discuss the concept of Black Economic Empowerment and how the scorecard works.
- (v) Describe the taxation of investments and typical investors in South Africa.
1. Outline the taxation treatment of different forms of investment for individual and institutional investors resident in South Africa.

(b) Specify the problems that may arise.

- (i) Analyse the investment needs of particular investors.
1. Analyse the influence of the liability characteristics, the regulatory environment, and other requirements, on the investment policies of the following South African institutions:
 - a life insurance company,
 - a general insurance company,
 - a self-administered defined-benefit pension fund,
 - a self-administered defined-contribution pension fund,
 - a medical scheme,
 - a Collective Investment Scheme,
 - a bank.
 2. Discuss the investment vehicles that may be particularly attractive to an individual investor in South Africa taking into account taxation, expenses and other relevant considerations.
 3. Discuss the rationale, and related considerations, for offshore investing for a South African institution.

(c) Develop solutions to the problems specified in (b).

- (i) Demonstrate knowledge and understanding of the principal techniques in portfolio management including risk control techniques.
1. Describe and discuss methods of organising the investment management of a large portfolio.
 2. Describe and discuss the types of investment strategies in the continuum from passive to active fund management.

3. Describe and discuss the main strategies used in hedge fund management.

(d) Monitor the experience of an investment portfolio and demonstrate how the analysis of experience can be used to feed back into the control cycle.

- (i) Describe the function and techniques of a performance measurement service.
- (ii) Demonstrate knowledge and understanding of the techniques used for investment management assessment & selection.
- (iii) Demonstrate knowledge of the structure of an institutional investment department or organisation and the implications for manager selection.

(e) Produce coherent advice for the overall management of an investment portfolio and for the proper management of assets, having regard to the liabilities.

- (i) Analyse complex problems associated with:
 - the influence of the liabilities on an appropriate investment strategy,
 - reducing the asset-liability mismatch risk,
 - improving investment return,
 - matching particular liability patterns,
 - analysing investment needs,
 - risk budgeting
 - choosing investment sectors,
 - choosing individual investments,
 - investment performance measurement,
 - reporting on investments.

and, through integrating and critically evaluating the results, draw conclusions particularly in relation to:

- the development of an asset strategy,
- addressing particular investment needs,
- monitoring the performance of investments.

End of Syllabus