

Actuarial Society of South Africa
EXAMINATION

19 May 2016

Subject F205 - Investment
Fellowship Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

- 1. Candidates will be issued with instructions to log-in using a password (which you will be provided with at the exam center).*
- 2. Candidates are required to submit their answers in Word format only using the template provided. You MAY NOT use any other computer program (e.g. Excel) during the examination.*
- 3. Save your work continuously throughout the exam, on your computer's hard drive that you have been provided.*
- 4. You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*
- 5. You must not start typing your answers until instructed to do so by the invigilator/supervisor.*
- 6. Mark allocations are shown in brackets on exam papers.*
- 7. Attempt all questions, beginning your answer to each question on a new page.*
- 8. Candidates should show calculations where this is appropriate.*

Note: The Actuarial Society of South Africa will not be held responsible for loss of data where candidates have not followed instructions as set out above.

AT THE END OF THE EXAMINATION

Save your answers on the hard drive.

Hand in your question paper with any additional sheets firmly attached.

<p>In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.</p>

QUESTION 1

- i) Discuss the broad structure of the listed South African equity market as defined by the FTSE ALSI index. [6]

The trustees of a South African Medical Scheme have elected to allocate a portion of their surplus assets to South African listed equities. They have been fairly risk-averse with their investment strategy to date - holding only cash and fixed income assets. The Chairman, who is not an investment expert, has approached you for advice on how to proceed.

The Chairman feels his next decision is on whether to follow an active or passive investment approach for the equity portion. He has noted how much cheaper passive portfolios are and has decided to follow a passive strategy.

- ii) Discuss the further considerations the trustees should take into account in deciding on a passive strategy to follow. [5]

The Scheme has been approached by a company offering “Smart Beta” products.

- iii) Discuss the mechanics, merits and drawbacks of Smart Beta investing, including specific reference to the following methodologies:
a) Fundamental indexation portfolios; and
b) Low volatility portfolios. [16]

[Total 27]

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QUESTION 2

You are the advisor to Mr Rich, a wealthy individual who has decided to set aside a significant amount of money to establish a charitable trust. He explains that the trust is to provide for the secondary and tertiary education of underprivileged students. He states that he would want the trust to run in perpetuity, so the trustees will need to seek new funding sources in future.

- i) Discuss the nature of the liabilities associate with this trust. [5]

In discussing an appropriate investment strategy for the trust, Mr Rich explains that he is uncomfortable with the idea of volatility and capital losses. He states that “because you can never lose money and your funds are always available” he thinks the assets should simply be invested in a money market fund. He acknowledges that money market returns are low, but says he has done some research. He has identified a small boutique which runs a high yield money market fund and suggests the assets could be invested with this manager. It has consistently paid returns around 1-1.5% ahead of its peers over the last 3 years.

- ii) Discuss the possible drawbacks of Mr Rich’s proposal. [10]

You recommend that in order to meet the objectives, and given the risk averse nature of Mr Rich, he could consider an absolute return fund. You explain that these funds generally aim to generate returns on the region of inflation plus 3-5% per annum over the longer term but that they also carry a secondary objective to preserve capital over the shorter term.

- iii) Discuss the various strategies which could be adopted by absolute return funds in order to meet these objectives and outline their limitations. [11]

Mr Rich liked the idea and replies that he has reviewed two such funds from different providers – one targeting “CPI+3%” and another targeting “CPI+5%”. He was surprised to see that one of them still lost around 15% of the fund value during the 2008/9 financial crisis. The other, while protecting capital in the crisis, has not even generated returns in line with inflation over a 5-year measurement period to date. He is surprised at the differences in return profile and unsure which would be best for his purposes.

- iv) Explain the different results to him in the context of the strategies discussed above and market events over the last 10 years. [8]

- v) State, with reasons, which fund the trust should pick. [4]

[Total 38]

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QUESTION 3

- i) Outline the key relative merits of the following investment vehicles for individuals making regular contributions.
- a) Retirement Annuity
 - b) Tax Free Savings Account
 - c) Life Endowments
 - d) Collective Investment Schemes [8]

You are the investment specialist on a product development team at a large public insurer. The company is partnering with a cellular phone network to offer a simple savings product that centres on a smartphone application. The plan is to allow users to easily deposit spare cash into the savings product on an *ad-hoc* or regular basis. Both a retirement and a discretionary savings product are being considered.

- ii) Describe the factors that should be taken into account in determining the investment choices to be offered to clients, and make a recommendation for each of the retirement and discretionary products. [27]

[Total 35]

[Grand Total 100]

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END OF EXAMINATION