INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

11 April 2016 (pm)

Subject SA6 – Investment Specialist Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You have 15 minutes before 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.*
3. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
4. *Mark allocations are shown in brackets.*
5. *Attempt all three questions, beginning your answer to each question on a new page.*
6. *Candidates should show calculations where this is appropriate.*

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

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.

1 (i) State the tax advantages for individuals of investing through a UK approved defined contribution pension scheme. [4]

(ii) List SIX common types of investment vehicles directed towards individuals. [3]

The head of business development of a large international asset management company is keen to extend the company's fund range with a new very high risk fund. This would be aimed at younger members of defined contribution pension plans.

She is considering launching a leveraged equity fund, which on average provides £3 of exposure for every £1 invested, with the leverage being rebalanced on a monthly basis.

She envisages the underlying exposure to be global equities, without any hedging of currency. The fund would use a MSCI World benchmark.

(iii) Explain why a lifestyle approach that uses this fund may be more appealing to younger members, given their risk appetite, than a lifestyle approach that uses unleveraged funds. [4]

(iv) Propose, with reasons, TWO derivative-based approaches that could be used for constructing this portfolio. [4]

(v) Outline the key risks of each approach in part (iv). [4]

(vi) Discuss the difficulties from an investor perspective created by monthly leverage management. [5]

A major investor has asked if it would be possible to manage this fund with an annual rebalancing frequency.

(vii) Discuss the implications of a less frequent rebalancing process. [4]
[Total 28]

2 A large fund manager in a Eurozone country manages a global equity fund, which divides the world into four main areas: A, B, C and D.

The following information is provided on this fund:

	Asset Area				
	A	*B*	*C*	*D*	*Total*
Value at 31.12.14 £m	400	300	150	150	1,000
Value at 31.12.15 £m	440	360	250	150	1,200
Local Index 31.12.14	100	100	100	100	-
Local Index 31.12.15	110	112	105	110	-
Currency Rate at 31.12.14 v £	5.5	1	1.4	54	-
Currency Rate at 31.12.15 v £	5	1	1.4	60	-

The fund has a benchmark that is weighted by area: 50% A, 20% B, 20% C and 10% D. The benchmark is rebalanced on 31 December each year.

(i) Perform an attribution analysis by market stating any assumptions that you make. [12]

In its marketing literature, the fund manager states that their competitive advantage is in asset allocation rather than in stock selection. The fund manager asserts that its investment managers are star managers at determining the best areas for stock market growth around the world.

(ii) Comment on the performance attribution from part (i) in light of the manager's assertion. [4]

The fund manager also manages a hedge fund-of-funds. The following information is provided on the performance of two hedge funds and the equivalent benchmark index over a 4-year period. The annual risk free rate of return over this period is 1% per annum.

	Hedge Fund X *% p.a.*	*Hedge Fund Y* *% p.a.*	*Index* *% p.a.*
Annual Return	11.0	12.0	7.0
Standard Deviation	17.0	20.0	12.0
Correlation Coefficient with Index	0.75	0.35	1.00

(iii) Calculate FOUR different risk adjusted performance measures for each hedge fund. [8]

(iv) Comment on the results from part (iii), stating any limitations that apply to them. [8]

[Total 32]

3 An investment bank has recently been criticised by its regulator for inconsistent knowledge about derivatives across its back-office staff and non-executive board members.

A paper is to be produced on Total Return Swaps for this audience to help improve their understanding of these contracts and their uses.

(i) Describe the points to be included in the paper under the following headings:

(a) Practical operation and investment characteristics
(b) Uses and merits
(c) Counterparty and liquidity risk

[16]

Following redundancy from the bank a group of former traders has decided to establish a new hedge fund.

(ii) Discuss the business and investment factors that the group should consider when setting up a new hedge fund. [11]

Due to a large number of similar funds being established, the financial regulator has decided to review its approach to the regulation of hedge funds.

(iii) Describe:

(a) the reasons for regulating investment funds.
(b) how this is typically achieved. [3]

(iv) Discuss the challenges facing the financial regulator in achieving a regulatory system for hedge funds that is fit-for-purpose. [10]

[Total 40]

END OF PAPER