INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

26 September 2016 (pm)

Subject SA4 – Pensions and other Benefits
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 must not start writing your answers in the booklet until instructed to do so by the supervisor.*

3. *You have 15 minutes of planning and reading time before the start of this examination. You may make separate notes or write on the exam paper but not in your answer booklet. Calculators are not to be used during the reading time. You will then have three hours to complete the paper.*

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) Outline the ways in which the UK government encourages retirement saving through the tax regime. [6]

(ii) Explain how tax relief on retirement savings is restricted for individuals in the UK. [6]

Non-retirement savings in the UK are taxed differently to retirement savings. It has been suggested that it would be fairer to bring the taxation of pension savings in line with non-retirement savings.

(iii) Set out the arguments for and against this change. [6]
[Total 18]

2 A small UK company currently operates a final salary pension scheme for all employees. There was a small surplus at the last triennial valuation. The company directors are concerned about the ongoing costs of providing future benefits within the scheme, and also the risk that there might be a deficit in the future.

The company's actuary has been asked by the directors to produce a report on:

- the ongoing costs of accrual and running the scheme.
- how these costs could be reduced.
- how these costs could be kept more stable.

(i) Set out the points that the actuary would make in the report. [12]

(ii) Explain the actions that could be taken to reduce the chances of a deficit arising in the future. [10]

The latest triennial valuation is due. Several new trustees have recently been appointed, who have little experience of defined benefit pension schemes. They have asked for training on the following areas of the valuation process:

- the documents that should be produced as part of the valuation.
- the key assumptions that will be required.
- the importance of the sponsor's covenant.

(iii) Outline the points the Scheme Actuary would cover in the trustee training.
[22]
[Total 44]

3 A company sponsors a defined benefit pension scheme in the UK which provides a pension on retirement that increases annually in line with inflation.

The trustees are reviewing the scheme's investments.

(i) Outline the six Myners Investment Principles for defined benefit pension schemes. [6]

To help with the investment review, the investment manager has requested details of the scheme's cashflows.

(ii) Explain how the principles used to set the assumptions for assessing the Technical Provisions might differ from those used to assess the cashflows. [6]

The company has now decided to close the scheme to future accrual. A new defined ambition scheme will be set up for future benefits. The company has suggested that the new scheme will be "defined contribution" in nature but with a guaranteed investment return underpin of 0% per annum. To help determine the possible cost of this guarantee the company has asked an investment adviser to model the potential scheme cashflows.

(iii) Set out the issues that the company needs to consider in relation to implementing the investment guarantee, including:

- the design of the scheme and
- the risks involved.

[6]

(iv) Describe the main cashflows that the investment manager will require to model the guarantee. [5]

(v) Discuss the practical problems in setting up the model. [6]

(vi) Comment on any possible shortcomings of the results of the model. [3]

(vii) Suggest ways to mitigate the risks to the company of providing the guarantee. [3]

(viii) Outline three other methods of risk-sharing in defined contribution pension schemes. [3]

[Total 38]

END OF PAPER