INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

23 September 2014 (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 have 15 minutes before the start of the examination in which to read the question. 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 answer in the booklet until instructed to do so by the supervisor.*

4. *Mark allocations are shown in brackets.*

5. *Attempt both 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 A valuation of a contracted-out defined benefit pension scheme was carried out as at 5 April 2013. The balance sheet on a Technical Provisions basis was as follows:

	£m
Active liabilities	150
Deferred pensioner liabilities	750
Pensioner liabilities	600
Total liabilities	1,500
Total assets	1,400
Deficit	100

The Scheme's assets were invested 80% in equities and 20% in corporate bonds at the valuation date.

The Scheme has been closed to new entrants for several years but remains open to accrual. Once in payment, pension increases on benefits accrued prior to 6 April 1997 (in excess of Guaranteed Minimum Pensions) are linked to price inflation, subject to a maximum of 4% per annum. Increases on other elements of pensions in payment are awarded in line with the statutory minima.

The Scheme Sponsor is concerned about the impact the Scheme has on its balance sheet.

(i) Outline the key risks faced by the Sponsor in relation to the Scheme. [4]

(ii) Outline how the Sponsor might assess the level of risk within the Scheme using a risk register. [5]

(iii) Suggest how the Sponsor might use a risk register approach to produce an action plan for de-risking the Scheme. [3]

(iv) Describe three distinct actions the Sponsor might take to reduce the level of risk in the Scheme. [9]

(v) Discuss, for each action in part (iv), the impact its implementation would have on:

- the Sponsor's balance sheet shown in the company accounts.
- the cost of the Scheme to the Sponsor.
- Scheme members.

[18]

After some discussion, the Sponsor and the Scheme's Trustees agree to consider purchasing annuities from an insurer to cover the Scheme's pensioner and deferred pensioner liabilities. An insurance company provides an indicative quotation of £1,500m, but the transaction does not progress. Six months later the same insurer is approached and provides a revised quotation of £1,700m. The Sponsor feels that this is too high a price and does not wish to proceed.

(vi) Suggest, with reasons, why the indicative quotation might have increased. [5]

(vii) Discuss what actions the Sponsor and Trustees might take to increase the likelihood of a bulk annuity purchase taking place in the future. Your answer should include:

- how a transaction might be made more affordable.
- preparatory work required before a transaction.

[20]
[Total 64]

2 A company sponsors two defined benefit pension schemes. The schemes' balance sheets at 30 June 2014 are set out below:

Scheme A	£m	**Scheme B**	£m
Active liabilities	10	Active liabilities	20
Deferred pensioner liabilities	150	Deferred pensioner liabilities	250
Pensioner liabilities	200	Pensioner liabilities	470
Total liabilities	360	Total liabilities	740
Total assets	350	Total assets	600
Deficit	10	Deficit	140
Assumptions:	% p.a.	Assumptions:	% p.a.
Discount rate	5.5	Discount rate	5.0
Real salary increases	1.5	Real salary increases	1.25
Inflation	3.25	Inflation	3.5

The Finance Director of the Company wishes to consider merging the two schemes.

(i) Suggest why the Company might want to merge the two schemes. [4]

(ii) Compare the relative funding levels of the two schemes, stating any assumptions you make. You may assume the liabilities above were calculated using the same mortality assumptions. [10]

(iii) Discuss the difficulties the Company would face in merging the two schemes. Your answer should consider:

- the relevant professional guidance the Scheme Actuaries would need to consider.
- how the difficulties might be overcome.

[12]

The same Scheme Actuary is currently appointed by both schemes and prepares financial reporting figures for the Company each year. The Finance Director, who is also a trustee of Scheme A, has asked the Scheme Actuary to advise all parties on the merger arguing that this seems to be the most cost effective solution.

(iv) Comment on any potential conflicts of interest faced by the Scheme Actuary and the Finance Director and suggest how these conflicts might be addressed. [5]

The merger of the two schemes is about to be completed.

(v) Suggest a checklist of practical actions that need to be taken over the short and medium term in relation to the newly merged scheme. [5]

[Total 36]

END OF PAPER