

EXAMINATION

22 September 2008 (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 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.*
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 4 questions, beginning your answer to each question on a separate sheet.*
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.

<p><i>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.</i></p>
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- 1** You are the Scheme Actuary to a small defined benefit pension scheme. The Scheme is approximately 80% funded on the ongoing valuation basis. The valuation basis assumes that all non pensioner liabilities are backed 50% by equities and 50% by high quality corporate bonds and that all pensioner liabilities are backed by government securities. This is broadly in line with the Scheme's current investment strategy.

The sponsor has a strong view that equities will perform well over the next five years, and has asked the Trustees to consider switching all the Scheme's investments into equities. The sponsor has stated that he sees no value in investing in low yielding assets given the long term nature of the Scheme.

The Trustees have asked you what the key considerations should be in assessing their response to this request.

- (i) Describe the key points to be considered. [4]
- (ii) Suggest some alternative proposals that could be considered to agree, if only in part, to the sponsor's request. [5]
- (iii) Outline the implications a change in investment strategy might have on the Scheme's funding principles. [5]

[Total 14]

- 2** You are the Scheme Actuary to a small defined benefit pension scheme. The scheme was established five years ago as a result of a management buyout, NewCo Ltd. from a larger organisation, LargeCo plc. NewCo's primary business activity is undersea gas pipeline maintenance.

When the scheme was established, there were 25 active members only, all of whom had benefits transferred in on a like-for-like basis from the LargeCo pension scheme. In addition, five of these original members were granted additional fixed pensions at retirement at the time of transfer. There are now 30 active members of the scheme, 10 deferred pensioners and two pensioners.

The Scheme is not contracted out and provides a pension at age 65 of $1/60^{\text{th}}$ of salary for each year of service at retirement, or earlier leaving service. On death before retirement the scheme provides for:

- a return of member contributions
- a pension of 50% of the prospective retirement pension (allowing for service to age 65) in favour of a spouse, or at the discretion of the Trustees, another dependant; and
- a child's pension payable to any children under 18

The scheme is invested fully in equities, and is approximately 75% funded on an ongoing basis. One of the Trustees, a long serving employee for whom there is a proportionately high share of the liabilities in respect of his own benefits, has expressed some concern that, were he to die before retirement age, there might be a

significant strain on the finances of the scheme. He has asked you whether this is a valid concern, and asked how any such risk might be mitigated.

- (i) Discuss what information you might require to assess the sums at risk on the death of a member. [4]
 - (ii) Explain whether you believe that the Trustee's concern is valid. [5]
 - (iii) Identify the risks in relation to the death in service benefits the Trustees might have to manage and describe how these could be mitigated, noting any potential barriers to doing so. [6]
- [Total 15]

3 You are the Scheme Actuary to an executive final salary pension scheme which is closed to new members. The Scheme is contracted out and provides retirement benefits from age 60. As part of the 30 June 2008 valuation the Trustees have asked you to review the Scheme's current investment strategy of 50% equities and 50% bonds.

The following summary information is available.

	<i>Number</i>	<i>Average Age</i>
Actives	2	58
Deferreds	10	54
Pensioners	80	70

FRS17 funding level	102%
Discontinuance funding level	80%

- (i) Discuss the issues that the Trustees should consider when setting the Scheme's investment policy. [10]
 - (ii) Describe how the results of an asset liability modelling exercise can assist the Trustees in reviewing the investment strategy. [6]
 - (iii) Discuss the issues that the Employer needs to consider in deciding whether to wind-up the Scheme once the last active member retires in two years' time or to continue the Scheme until the last pensioner dies. [5]
 - (iv) Outline the actions the Trustees need to take if the Scheme is to be wound-up. [9]
- [Total 30]

- 4 Company X operates a defined benefit pension scheme which is closed to future accrual. Company X is experiencing trading difficulties and there are doubts about its future viability. Company X is not currently paying contributions in to the scheme.

The balance sheet on an accounting basis as at 1 April 2008 is set out below:

Deferred pensioners	£45m
Pensioners	£60m
Total Liabilities	£105m
Assets	£105m
(70% equities, 30% fixed interest gilts)	

A funding valuation with an effective date of 1 April 2008 is underway and the Trustees have presented their thoughts on the methodology to be used to determine the technical provisions, together with a suggested recovery plan. The balance sheet and contribution requirements on the Trustees' preferred basis is as follows:

Deferred pensioners	£65m
Pensioners	£70m
Total Liabilities	£135m
Assets	£105m
Deficit	£30m
Contributions	£10.5m per year for three years.

- (i) Discuss the possible reasons for the difference between the technical provisions and the value of the liabilities on the accounting basis. [4]
- (ii) Comment on the reasons why the Trustees may have selected a recovery period of three years. [2]

You have been appointed as Company X's actuarial adviser and are considering ways in which to reduce the Scheme's liabilities. You have noticed that the individual transfer values for deferred pensioners are 75% of the reserve required for the accounting liabilities. You have also noticed that the liability for pensioners on the accounting basis excluding all non-statutory increases is 80% of the full accounting liability. You have suggested:

- enhancing the individual transfer values by 10% with Company X paying the 10% enhancement in to the Scheme; and
 - offering a cash payment to pensioners of 10% of the full accounting value of their pensions in lieu of their non-statutory increases
- (iii) Calculate the net saving that Company X will expect to make assuming 50% take up of each offer. State any further assumptions that you make. [8]
- (iv) Set out the points to be included in a report to Company X covering the approach that should be followed to ensure that this exercise has the best chance of meeting the needs of Company X. [3]

- (v) Discuss what actions the Trustees should take in relation to this offer to the deferred pensioners. [13]
 - (vi) Set out the information to be included in a communication to the deferred pensioners in relation to the enhanced transfer value offer. [11]
- [Total 41]

END OF PAPER