EXAMINATION

24 April 2009 (pm)

Subject ST4 — Pensions and other Benefits
Specialist Technical

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 eight 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.

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 In the context of a defined benefit pension scheme written under Trust

(i) State the main responsibilities of the Trustees. [2]

(ii) List the principal duties of a Trustee. [2]

(iii) Outline the more important Trustee powers usually contained in the Trust Deed. [2]
[Total 6]

2 (i) Discuss why it may be appropriate for a company's accounts to include information about its pension arrangements. [4]

(ii) List the main items which it may be appropriate for a company to disclose in respect of its defined benefit pension scheme. [4]
[Total 8]

3 The Trustees have asked their actuary to explain the key stages of the funding valuation process and produce a project management action plan.

(i) List the key stages of the valuation process. [4]

(ii) Set out how the valuation process is assessed and monitored using the actuarial control cycle. [3]

(iii) Outline the key features of a project management action plan. [3]
[Total 10]

4 As part of the latest formal valuation, the Trustees of a defined benefit pension scheme assessed the covenant of the sponsoring employer and concluded that it was strong at that time.

(i) Outline the implications for the Scheme of a strong covenant in terms of investment strategy, valuation assumptions and payment of any deficit. [5]

Following a period of difficult trading conditions, a re-assessment of the covenant has concluded that it is now less strong than previously thought.

(ii) Outline how the Trustees should react to this new information. [3]

(iii) Outline the possible impact of this new information on the future investment strategy, valuation assumptions and any deficit payment schedule. [4]
[Total 12]

5 A final salary pension plan provides only for pensions on retirement and to the spouse on subsequent death after retirement. Members pay contributions to this plan at the rate of 5% of their pensionable salary. The plan allows members to exchange up to 50% of their pension at retirement for a lump sum, on terms specified from time to time by the actuary (currently $12 lump sum for every $1 of annual pension). The spouse's pension payable on the death of the member after retirement is not affected by this option.

The latest actuarial valuation produced the following results:

	Accrued Liabilities	*Employer's standard contribution rate*
Active members	$24.0m	13% of pensionable salary
Deferred members	$12.0m	
Current pensioners	$10.0m	
Total	$46.0m	

The valuation assumes that active and deferred members will exchange 25% of their pension for a lump sum at retirement.

On the funding assumptions, the value of the single-life annuity at retirement is 16.

The spouses' death after retirement liabilities are approximately one-sixth of the total liabilities. Estimate stating any further assumptions you use, the impact on the total liabilities and employer's standard contribution rate of:

(i) assuming instead that members exchange the maximum amount of pension for a lump sum. [5]

(ii) assuming instead that the exchange terms are improved to be 90% of the value of the member's pension, on the actuarial valuation assumptions. [2]

(iii) the combined effect of both (i) and (ii) together. [2]

One of the male members of the plan who is retiring shortly has just learned that he is not expected to survive more than one year. One of the Trustees has expressed concern that this may result in a significant additional liability to the plan should the member exercise his right to take the maximum lump sum.

(iv) Demonstrate whether the Trustees concerns are valid. [3]

[Total 12]

6 A company has recently set up a new defined benefit pension scheme which is open to all permanent employees.

Under the three headings of:

- member options
- eligibility and
- augmentations

(a) Describe the areas over where there may be discretion in the way the benefits from the scheme are determined.

(b) Explain for each discretion whether the sponsoring employer would wish to retain the exercise of this discretion, or be prepared to pass on the exercise of this discretion to a Trustee body.

[15]

7 The next funding valuation of a large defined benefit pension scheme is about to take place. The actuary is considering the mortality assumption to be used for the valuation.

(i) State the different types of information on mortality that may be available. [3]

(ii) Outline the investigations and other considerations that may be taken into account in setting the initial mortality rate assumptions before allowance for future improvements. [7]

(iii) Discuss the impact of future improvements in mortality and how they may be incorporated into the valuation assumptions. [5]

(iv) Outline how the assumption for mortality may differ for valuations for the following purposes:

- disclosures in Company accounts
- cost of providing guaranteed benefits from an Insurance Company
- a bulk transfer to another pension provider

[3]
[Total 18]

8 The corporate sponsor of a large defined benefit pension scheme has appointed an actuarial adviser to advise on the funding valuation and risk management issues.

(i) Outline the key areas of funding and risk management activities that the sponsor's actuarial adviser may be involved with. [8]

(ii) Discuss the key differences of the role of the adviser to the corporate sponsor and that of the actuary appointed by the Trustees. [4]

(iii) The local actuarial body provides professional guidance. Outline what this may contain. [3]

(iv) Discuss the potential conflicts of interest if one individual advises both the Trustees and the corporate sponsor and suggests ways of managing such conflicts. [4]

[Total 19]

END OF PAPER