EXAMINATION

3 April 2006 (am)

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 both 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.

1 A large multinational corporation owns two UK engineering companies, A and B. Each subsidiary currently runs a defined benefit pension scheme that is open to new members. An outline of the two schemes is as follows:

	Scheme A	**Scheme B**
Status	Contracted-out on Protected Rights basis	Not contracted-out
Pensionable Salary	Basic Salary at each 1 July	Basic Salary plus Annual bonus at each 1 April
Final Pensionable Salary (FPS)	Highest pensionable salary in the last 3 years	Pensionable Salary in the preceding 12 months
Pension	1/60 × FPS × Pensionable Service	1/60 × FPS × Pensionable Service
Normal Retirement Age (NRA)	63	65
Members contribution rate	4% × Pensionable Salary	3% × Pensionable Salary
Last MFR valuation date	1 July 2003	1 April 2004
Market Value of Assets at valuation date	£17.1m	£32.6m
Value of Liabilities (on MFR basis including expense provision)	Employed members: £4.2m Deferred Pensioners: £5.8m Current Pensioners: £9.0m	Employed members: £6.1m Deferred Pensioners: £9.2m Current Pensioners: £12.7m
Number of members	Actives: 30 Others: 117	Actives: 75 Others: 371
Average Basic Salary for active members	£20,000 p.a.	£21,000 p.a.

The corporation is considering merging the two schemes as at 1 July 2006 together with a review of the benefits. The proposal includes:

- Merge the schemes and pay a one off special company contribution of £5m to the combined scheme.

- Change future service benefits to a Revalued Career Average Earnings basis of salary rather than "final salary". Revaluation to be in line with RPI.

- Harmonise NRA at age 65.

- Members will have the choice of two benefit scales as follows:

  Scale 1: Member contributions of 5% of Pensionable Salary to maintain 1/60ths accrual.

  Scale 2: Member contributions of 4% of Pensionable Salary for 1/80ths accrual.

- Pensionable Salary for future service redefined as "Basic Salary at previous 6 April less the single persons Basic State Pension at that date".

- Members' consents to the merger will not be sought.

- Past service accrued benefits at 1 July 2006, based on FPS at that date, are to be revalued in line with RPI.

(i) Set out the issues normally considered when deciding which of the two schemes should be the recipient for the transfer of all assets and liabilities in a merger exercise, and state with reasons which of Scheme A or B above should be the receiving scheme in this instance. [5]

(ii) Discuss the factors each set of trustees should take into account in deciding whether to accept the corporation's proposal. [8]

(iii) The Scheme Actuary to the transferring scheme has been asked to comment on the actuarial aspects of the proposal. Outline the issues he should consider to enable him to comply with this request. [4]

(iv) Discuss the impact of the proposed changes from the active members' viewpoint and comment on which of the two future service benefit scales is likely to be the more popular choice. [7]

(v) The chief financial officer (CFO) of the parent corporation currently acts as a trustee to both Schemes A and B.

(a) Outline his general responsibilities and duties as a trustee.
(b) Comment on any areas of potential conflict of interest for the CFO.
(c) Suggest ways in which any conflict of interest could be minimised.

[8]

(vi) At the last valuation dates the target asset allocation was:

Scheme A: 60% equities, 40% bonds;
Scheme B: 80% equities, 10% bonds, 10% cash,

and no reviews have subsequently taken place.

Following a merger of the schemes, a new investment consultant to the merged scheme has been appointed and he has been asked to review the investment strategy going forward. Outline the key issues he should consider.

[5]
[Total 37]

2 You are the adviser to a medium-sized UK Company which is having difficulty attracting and retaining the skilled staff that it requires to run its business. The Board of Directors has agreed that a not contracted-out occupational Defined Contribution (DC) pension scheme should be established for all employees. The Finance Director (FD) has agreed that a budget of 6% of the total basic salary roll can be made available for this purpose and has stressed that the total cost of the pension scheme must not exceed this figure.

The HR Director has suggested the following DC scheme design:

- Compulsory member contributions into fund = 5% of basic salary.

- Company contributions into fund = X% of basic salary where:

    - X = 5% below age 45
    - X = 7% at age 45 or over

- Normal Retirement Age (NRA) = 65.

- Lump sum payable on death in service = the member's accumulated DC fund value.
- At retirement the member's accumulated fund is converted into a pension within the scheme at conversion rates to be set by the Trustees.

- At retirement the members choose the rate of pension increases in payment to be secured and the extent to which a contingent dependant's pension will be provided.

- The Trustees will decide on the range of investment options to be offered to members.

(i) The HR director has asked you to comment on the proposed design. Set out the points that you would make in your response, highlighting how well the following design objectives will be met:

- improving recruitment and retention
- meeting the budget set by the FD
- managing risk for the Company

[11]

(ii) Suggest some modifications to the design that would help to alleviate some of the difficulties that you have identified in each of the three areas in (i) above. [3]

(iii) List the key requirements of the following Myners Principles as they apply to DC schemes:

- effective decision making
- clear objectives
- performance measurement

[5]

The pension scheme is established in line with the HR Director's original proposal and set up with effect from the "Launch Date".

There is a statutory requirement to produce annual benefit statements which illustrate the projected benefits from DC pension schemes. The benefit statements must show both the projected pension at NRA in nominal terms and the replacement ratio at NRA. Investment fund choices are assumed to remain unchanged between the effective date of the statement and NRA.

A brief summary of the basis at Launch Date on which these statutory illustrations must be prepared is set out below:

Price inflation	2.5% p.a.
Earnings inflation	2.5% p.a.
Return on equities	7.0% p.a.
Return on cash	4.0% p.a.
Annuity rate at age 65 (including 50% dependant's pension and guaranteed LPI increases)	£20 per £1 p.a. pension
Expense loading pre retirement	1% p.a. of DC fund value

(iv) Using only the information provided calculate the disclosures required for a benefit statement with an effective date of the Launch Date for the following two members:

- Member A who joins the scheme on the Launch Date (which is his 35th birthday), whose basic pay is £15,000 p.a. and who chooses to invest his DC fund 100% in equities.

- Member B who joins the scheme on the Launch Date (which is his 50th birthday), whose basic pay is £25,000 p.a. and who chooses to invest his DC fund 100% in cash.

[8]

(v) The HR Director is considering providing an improved annual benefit statement to include both the statutory disclosures and some additional information.

(a) Set out the limitations of providing the statutory disclosures only.

(b) List the caveats that you would wish to include alongside the statutory disclosures.

(c) Suggest the additional information to include on the annual benefit statement.

[14]

(vi) It is one year on from the Launch Date and the HR Director is reviewing the progress of the pension scheme. The market values of equities have fallen by an average of 25% over the year. The statutory basis for benefit statement projections is unchanged except in the following areas :

Return on equities	6.0% p.a.
Return on cash	3.0% p.a.
Annuity rate at age 65 (including 50% dependant's pension and guaranteed LPI increases)	£22 per £1 p.a. pension

Carry out the calculations in (iv) twelve months after the Launch Date for Member A:, listing any additional assumptions that you need to make. [6]

(vii) The HR Director has asked you to explain the results of your benefit statement calculations and the implications for communicating with members twelve months after Launch Date. Set out the points that you would include in a letter to the HR Director. [4]

The HR Director is concerned that the risks of the DC pension scheme are too great for some members. He is proposing to introduce two optional underpins to his original DC scheme design:

Underpin 1: A guarantee that investment returns credited to DC funds cannot fall below 0% in any scheme year.

Underpin 2: A guarantee that the pension at retirement will not be less than 1/100th of final basic pay for each year of pension scheme membership.

The HR Director has suggested that any member who wishes to take advantage of either (or both) of these underpins pays an additional charge to meet the expected cost of the underpin. He has asked for your advice.

(viii) Concentrating on the following aspects, outline the points that you would make in your response:

- Whether the introduction of these underpins is likely to improve or worsen the chance of the scheme meeting the original design objectives set out above.
- How you would estimate the cost of each underpin.
- How you would structure the underpin charge to members.
- How the funding and investment strategy of the scheme might need to change as a result of introducing these underpins.

[12]
[Total 63]

END OF PAPER