EXAMINATIONS

20 September 2004 (am)

Subject 404 — UK Fellowship Pensions

Paper One

You must answer this subject only, you may not attempt another subject in the 400 series.

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 6 questions, beginning your answer to each question on a separate sheet.*

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 Actuarial Tables and your own electronic calculator.

1 A UK company currently offers a defined benefit contracted-out occupational pension scheme. The company is reviewing its pension provision and is considering switching future pension provision to a defined contribution basis.

(i) Outline the possible reasons why the company might wish to consider switching future pension provision to a defined contribution basis. [5]

(ii) Outline the advantages and disadvantages from the point of view of the member of benefits provided on a defined contribution basis as opposed to a defined benefit basis. [5]

[Total 10]

2 The trustees of a defined benefit UK occupational pension scheme are reviewing the investment strategy for the scheme. Investments are currently held in a with profits insurance contract with a mutual insurance company.

(i) It has been suggested that new monies could be invested in either a segregated fund or an insurance company managed fund contract, or continue to be paid into the current with profits contract. Discuss the advantages and disadvantages of these three options from the point of view of the trustees. [7]

(ii) Outline the factors which the trustees should take into account when deciding whether to switch the existing with profits assets into an alternative investment medium. [3]

[Total 10]

3 A UK final salary pension scheme which is not contracted-out has just had a valuation completed, as at 1 January 2004.

Ongoing Valuation balance sheet — 1 January 2004

	£'000's
Assets	
Market Value	12,000
Liabilities in respect of:	
Pensioners	6,061
Deferred pensioners	4,000
Actives	5,000
Total	**15,061**

The only differences between the financial assumptions underlying the cash equivalent transfer value basis and the ongoing basis are as follows:

Pre-retirement —

Deferred Pensioners: Effective discount rate 0.5% per annum higher on cash equivalence.
Average term to retirement 15 years.

Active Members: Effective discount rate 1.5% per annum higher on cash equivalence.
Average term to retirement 20 years.

Members with a deferred pension currently have the option to take an unreduced cash equivalent transfer value.

(i) State the factors that the trustees should take into account when deciding whether to continue to offer unreduced transfer values. [5]

(ii) Assuming accrued pensions for active members and deferred pensioners are treated equitably for priority purposes calculate two possible percentage reductions in transfer values. State any further assumptions you make. [7]

(iii) The trustees have agreed to reduce transfer values. State any changes which should be made to the disclosure notes attached to the quotation of a transfer value. [2]

[Total 14]

4 You are advising the trustees of a UK salary related defined benefit scheme, who are reviewing the scheme's investment strategy.

At the last valuation on 31 December 2002, the scheme had the following liability profile on an ongoing basis:

	£m
Active members	30
Deferred pensioners	15
Members in receipt of pension	25
TOTAL	70

The market value of the assets was £75m, over 90% of which was invested in equities and property.

Trustee A would like all the scheme assets to be invested in index linked gilts as this "will protect the fund against future inflation".

Trustee B would like all the scheme assets to be invested in fixed interest corporate bonds "as this provides a good match against the liabilities for members once they ultimately retire".

Trustee C would like the fund invested 50% in UK equities and 50% in European equities as "the equity market will recover over the next 5 years, at which time the UK currency will be the euro".

(i) (a) Outline the general investment objectives for trustees of defined benefit schemes.

(b) Discuss each of the above statements in relation to these objectives. [8]

(ii) Suggest with reasons a suitable investment strategy for the scheme. [7]
[Total 15]

5 The government of a country with a well-established occupational pension sector has decided to change the way in which tax approval limits operate. In future, individuals will only be able to enjoy favourable tax treatment on funds with a value below a particular amount (€2.0m). The legislation is to be introduced in one year's time and the limit will apply over the lifetime of the individual (rather than on a scheme by scheme basis). Any funds accruing in excess of the maximum will be taxed at a penal rate.

You have been asked to advise a senior individual aged 40 who is negotiating a pensions package with a new employer who operates a defined benefit pension scheme. The individual is intending to transfer his previous final salary benefits into the new employer's scheme — the current transfer value is €1.8m.

Outline the issues the individual needs to take into account in negotiating the package, and the information you will need in order to advise him.

[24]

PLEASE TURN OVER

6 A UK company is preparing the disclosure on the UK final salary pension scheme for its company accounts. The pension scheme is closed to new entrants. The disclosure is at 31 March 2004 and follows the requirements of FRS17.

(i) The Finance Director is keen that the disclosed deficit on the pension scheme is kept to a minimum.

Discuss what scope there is in setting the actuarial assumptions to assist in achieving the Finance Director's wish. State any constraints. [12]

(ii) Prior to discussing possible revisions to the assumptions, as company actuary, you have calculated the scheme's balance sheet as at 31 March 2004, but on the assumptions used for the year ending March 2003. The results and principal financial assumptions are as follows:

	Year Ending 31 March 2003	*Year Ending 31 March 2004*
Market Value of assets	£2.4m	£2.2m
Value of Liabilities in respect of:		
• Actives	£1.0m	£1.3m
• Deferred pensioners	£0.7m	£0.74m
• Pensioners	£1.2m	£1.18m
Deficit	(£0.5m)	(£1.02m)

Assumptions:	Discount rate:	5.5% p.a.	(Based on the median yield on an appropriate index)
	Salary inflation:	4.25% p.a.	
	Inflation:	2.5% p.a.	
	Long term expected return on:		
	Bonds and Cash:	5.0% p.a.	
	Equities:	7.0% p.a.	

The asset portfolio breakdown at 31 March 2003 was 40% Bonds and Cash, 60% Equities. The only cashflows throughout the last fiscal year were:

Contributions (member & company)	£0.35m
Pensions paid	(£0.08m)
Expenses	(£0.02m)
Investment income	£0.13m

The Finance Director has asked for an analysis of the main items of experience.

If the cost of one year's accrual of pension benefits as at 31 March 2003 on the 2003 FRS17 basis is £0.25m, estimate the contribution to surplus or deficit from the experience on the following 2 items and the annual achieved rate, assuming membership movements were in line with expectations.

(a) salary inflation
(b) investment return

[5]

(iii) After discussion a discount rate of 6.25% pa has been proposed, this being the median yield on an appropriate index + 0.5%.

(a) If the discounted mean term of the liabilities is 14 years, estimate the new balance sheet on the 6.25% pa discount rate.

(b) Furthermore based on the actual experience, the Finance Director proposes a salary increase assumption of 2.75% p.a. Estimate the new balance sheet incorporating this adjustment on top of that in (a) above. The average future working lifetime of active members is currently 18 years.

[4]

(iv) Comment on the proposals in (iii) above. [6]

[Total 27]

END OF PAPER