EXAMINATIONS

11 April 2002 (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 not contracted-out UK final salary pension scheme which provides index-linked pension increases in payment and deferment is funded using the Minimum Funding Requirement (MFR) assumptions as set out in GN27. All the members are in employment and more than 15 years from retirement. Concerned at escalating pension costs the finance director has decided to cease future accrual so that all members become deferred pensioners and introduce a separate money purchase scheme for future service. In the light of this, the trustees decide to switch all their investments into a FTSE All Share equity tracker fund.

At 31 December 1999 the liabilities (before the expense loading) were £53 million and the assets had a market value before the investment switch of £60 million. The scheme closes immediately and the asset switch is made on 31 December 1999.

(i) Calculate the funding level on the MFR basis at 31 December 1999, before the investment switch. [1]

(ii) Assuming that no members have retired, died or transferred to an alternative arrangement over the period to 31 December 2001, determine the funding level at 31 December 2001 on the MFR basis given the following information:

	31/12/1999	*31/12/2001*
RPI	167.5	173.4
FTSE All Share Index Dividend Yield	2.12%	2.63%
FTSE All Share Index	3242.06	2523.88
FTSE All Share Total Return Index	3050.51	2488.96

State any assumptions you have to make to complete this calculation. You can ignore mortality in deferment. [4]

(iii) Explain why the MFR funding level has fallen below 100% and comment on the implications of your result [5]
[Total 10]

2 (i) Where funds are set aside to fund a defined benefit, it is possible that a surplus or deficit of assets will exist when the benefit is due. Describe some of the sources of such a surplus or deficit. [5]

(ii) Explain why you would wish to analyse the experience of a defined benefit scheme over a period. Describe the data you would require. (A list of individual data items is not required.) [4]

(iii) Explain with reasons the factors relating to the data you would consider when deciding whether carrying out a full analysis of experience would be meaningful. [2]

(iv) Discuss the factors that should be considered before using the results of any analysis of experience. [4]
[Total 15]

3 The directors of a newly established business are considering providing pension benefits for their UK employees. Compare the main features of employers' occupational money purchase pension schemes and personal pension arrangements under the following headings:

(i) Member and employer contributions. [5]

(ii) Benefits and benefit limits on retirement at normal retirement age, early leaving and death-in-service [10]
[Total 15]

4 (i) List the requirements of GN19 in relation to a Scheme Actuary who has been asked to certify the debt on an employer under Section 75 of the Pensions Act. [5]

(ii) Explain why a shortfall calculated on the basis that members' benefits are secured through immediate and deferred annuities with an insurance company is likely to be significantly higher than with one calculated under GN19. [5]

(iii) Describe the advantages and disadvantages of legislation being amended to require debts to be calculated on the basis of insurance company deferred and immediate annuity rates from the point of view of scheme members and the sponsoring employer. [5]
[Total 15]

5 A UK company operates a revalued career average (RCA) pension scheme with revaluation in line with price inflation. The company is about to embark on a programme of corporate disposals. The purchasers will be required to provide pension benefits in respect of past and future service for the employees of the businesses being sold.

(i) Outline how a sale and purchase agreement usually addresses pensions issues when the seller has a defined benefit pension scheme. [10]

The last formal valuation of the RCA scheme disclosed a funding level of 150% and an ongoing employer's contribution requirement of 15%. No employer contributions are currently being paid.

The purchasers are likely to be foreign companies with no UK operations and it is expected that the new employers will need to participate in the RCA for a limited period.

(ii) You have been asked by the finance director to prepare a report for him on the issues to be considered in connection with the calculation of transfer values to purchasers' schemes and the temporary participation of any purchaser in the scheme. Draft your report.
[2 marks available for drafting] [10]
[Total 20]

6 You have been appointed as actuarial adviser to a newly formed UK Company. The Company was previously a division of a large UK multinational and has been bought out by the management. Under the terms of the deal the new Company is required to set up a new pension scheme, within one year of the deal, which provides identical benefits for initial employees to those previously provided under the multinational's large final salary scheme. The new scheme must remain in place for at least five years after the buy out. In addition the new scheme must be capable of receiving a transfer of the members' past service rights.

The new finance director (who has no previous pensions experience) has stated that the plan is to build up the Company as a profitable enterprise and then sell it in five years. He has stated that he requires:

- contribution rates which do not fluctuate significantly over the five year period
- no risk of any deficits in the scheme at the end of the five year period which will potentially reduce any sale price
- costs which are no greater than those currently payable under the existing scheme

You have been asked to draft a report setting out your reply to the finance director which should cover:

- the individual experience items which could lead to each of the criteria not being met in isolation
- actions that could be taken to reduce the risk of each factor happening
- conflicts between the finance director's requirements
- the possible impact of different investment strategies
- the further information that you require in order to recommend the most appropriate approach to funding the new scheme

Draft your report. [5 marks available for drafting][25]