EXAMINATIONS

April 1999

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. *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.*

2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*

3. *Write your surname in full, the initials of your other names and your Candidate's Number on the front of the answer booklet.*

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 and this question paper.

In addition to this paper you should have available Actuarial Tables and an electronic calculator.

1 (i) Outline the tax treatment of an established UK approved final salary pension scheme. [4]

(ii) Discuss the purpose of funded un-approved retirement benefit schemes outlining the UK tax implications for the employer and employee. [4]

[Total 8]

2 A large company has two separate pension schemes for different parts of its workforce, a defined benefit pension scheme and a defined contribution scheme. Describe briefly how the possible benefit designs of each scheme could allow for early retirements. Your answer should include reference to any assumptions used to determine benefits and any other factors which may need to be considered. [9]

3 (i) List the main reasons for performing a valuation of a UK final salary pension scheme. [3]

(ii) Outline the steps an actuary would follow in performing the valuation of the scheme's assets and liabilities. [7]

(iii) (a) Set out in general terms how you would analyse the experience of the pension scheme between the last two annual valuations.

(b) Outline how the results of the analysis may be used. [6]

[Total 16]

4 A UK company operates a contracted-out final salary pension scheme. All staff are eligible although the take up amongst the part-timers, who constitute about half the staff, is low. Members contribute 5% of basic salary and the Scheme provides a pension at age 60 of 1/60 of basic salary for each year of service together with a 50% spouse's death after retirement pension.

The results of the Scheme's 1st January 1999 valuation on the long term funding basis showed a surplus which is being used partially to offset future company contributions.

The company is considering a flexible benefits proposal where the members can choose for future service only to pay a lower contribution for lower benefits as follows;

Contribution Rate %	*Accrual Rate*
3	80
5	60

The company wishes to consider paying a non pensionable cash supplement to those staff who select the lower contribution rates.

The finance director has asked for your comments on these proposals. Draft a report explaining:

- The advantages and disadvantages to the company and staff of the proposals.
- The factors the company needs to consider in deciding on the level of cash supplement to pay to staff. You should include comments on the actuarial aspects but are not required to set out a basis
- Any practical issues that may need to be addressed in the implementation.

[4 marks are available for drafting]
[26]

5 You are the scheme actuary to a small approved UK final salary scheme which is not contracted-out of SERPS. There are no discretionary benefits. All pensions receive limited price indexation in payment. The scheme secures pensions in payment with annuities bought at retirement from insurance companies. All other assets are invested in equities.

(i) Describe briefly the actuarial basis for calculating the liabilities of the scheme under the statutory minimum funding requirement (MFR). (Details of calculations in relation to the schedule of contributions are *not* required.) [9]

(ii) Compare, for deferred pensioners only the requirements governing the actuarial basis for calculating cash equivalents with the actuarial basis prescribed by the MFR. [4]

(iii) If the MFR did not apply, describe briefly with reasons the method you would recommend to the trustees for the calculation of cash equivalents. (Details of bases are *not* required.) [4]

(iv) The scheme's first valuation under the MFR regulations is now due. The finance director has suggested that the funding valuation should also be carried out on the MFR basis. Describe briefly the advantages and disadvantages of this approach. [6]
[Total 23]

6 You are the Government Actuary in an industrialised country establishing a State Pension Scheme from which individuals may be contracted-out. The decision to contract-out is at the employer's option for schemes which undertake to reproduce at least the State Scheme benefits. In return, employers receive a reduction in their State contributions which is a flat percentage of earnings. The Government has undertaken to guarantee the contracted-out benefits.

The reduction is designed to represent the average cost of funding the State Scheme benefits. The reduction is subject to review every three years.

The State Scheme provides a retirement pension of 1% of each calendar year's earnings revalued to State Pension Age in line with increases in prices.

You are advising the Government about the amount of the reduction.

(i) List with reasons the other information you would require about the benefits provided by the State Scheme in order to undertake your calculations. [8]

(ii) Outline the safeguards you would build into the terms for contracting-out. [6]

(iii) It has been proposed that there should be an option of paying single premiums to reinstate State Scheme benefits when a contracted-out scheme is wound-up. Explain the considerations that need to be taken into account in setting the terms. [4]
[Total 18]