

## EXAMINATIONS

10 September 2001 (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. *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.*

<p><i>In addition to this paper you should have available Actuarial Tables and an electronic calculator.</i></p>
--

**1** You are the Scheme Actuary to a final salary pension scheme. The trustees have asked you to give details regarding your professional requirements in disclosing information to the Occupational Pensions Regulatory Authority (OPRA).

(i) Outline the details of Section 48 (1) of the 1995 Pensions Act. [2]

(ii) Discuss the reporting of breaches to OPRA by Scheme Actuaries. [6]

[Total 8]

**2** You are the Scheme Actuary to a defined benefit pension scheme. The formal actuarial valuation is being conducted, and the valuation balance sheet is as follows:

	<i>£m</i>
Liabilities	
Actives	20
Deferreds	20
Pensioners	<u>40</u>
TOTAL	80
Assets	<u>100</u>
Surplus	20

Assets have been taken at market value. The liabilities have been determined using a basis linked to market information. For example, the valuation rate of interest is equal to the gross redemption yield on long dated government fixed interest stock, plus a margin for potentially superior returns arising from the actual investments of the scheme. At present, the assets are entirely invested in equities.

The rules of the scheme state that the trustees must consider whether benefit improvements should be granted from any surplus revealed at a formal valuation. This is the first time that the valuation has revealed a surplus and the Trustees have asked you to recommend whether or not any part of the surplus should be used to provide benefit improvements.

Describe the points you would make in your reply. [15]

**3** You have agreed to advise a senior corporate manager regarding her total retirement benefits. She is currently aged 45 and hopes to retire at age 55. All her benefits are in the form of defined contribution pension arrangements (with a wide range of investment options) and she has no substantial investments besides these pensions.

(i) Outline how you would provide her with advice on her benefits on retirement including details of how you would derive any actuarial bases you would use. [7]

(ii) Explain briefly the features of the principal investment options likely to be open to her. [10]

[Total 17]

- 4 (i) Outline the common aims of accounting standards relating to pension costs. [3]
- (ii) Discuss the choice of actuarial methodology and assumption to value the assets and liabilities of a defined benefit pension scheme and the relative importance of the balance sheet and profit and loss account in the following: IAS19, SSAP24, FRED20 and FAS87. [11]
- (iii) List briefly the possible disclosure requirements that may be needed. [3]
- [Total 17]

5 You are the Scheme Actuary to a defined benefit pension scheme. The contribution clause in the trust deed and rules states that the contribution rate will be set by the company, in consultation with the actuary, from time to time. The company has been concerned about volatility in its contribution rate, and has suggested that it would prefer to set the same contribution rate every year in the future. You have been approached, for the purpose of consultation, as required by the deed.

Outline the points you would make in your response. [18]

6 You are the actuary to a company that is introducing flexible benefit arrangements for its staff. It is intended to include some aspects of the defined benefit pension scheme in the package. The following aspects are under consideration:

- The amount of death in service lump sum.
- The accrual rate.
- The date upon which benefits can be taken without reduction and without consent from either the company or the trustees.

The company has asked you to advise the project team on issues, including pricing, to help them finalise the detail of the design. The project team includes the Human Resources director, the Finance director and the Pensions Manager.

Draft your report to the project team covering the following areas:

- maximum and minimum benefits
- selection
- cost
- pension scheme issues including Additional Voluntary Contributions (AVCs)
- switching
- a possible design for each of the 3 elements of the pension scheme under consideration

[There are 5 marks available for drafting]  
[25]