

EXAMINATIONS

April 1998

Subject H — Pensions

Paper One

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 12 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>
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- 1** (i) Define the accounting objectives under SSAP24. [3]
- (ii) For each of the following methods, explain briefly the circumstances under which it is likely or otherwise to meet the above accounting objectives:
- Current unit (with one year control period)
 - Projected unit (with one year control period)
 - Attained age
- [3]
[Total 6]

2 An insurance company has been supplied with the following information relating to the purchase of an annuity for a not contracted-out individual pensioner:

- date of birth of pensioner;
- sex of pensioner;
- amount of pension;
- proportion of spouse's pension;
- marital status; and
- level of pension increases.

List the additional information in respect of the individual pensioner that the insurance company will require in order to price the annuity accurately and to commence payment. [3]

3 Discuss the advantages and disadvantages of property investment for a large defined benefits pension scheme which is closed to new entrants. [4]

4 For a UK final salary scheme:

- (i) Describe briefly the types of death benefits that may typically be provided. [4]
- (ii) Outline the factors that need to be taken when considering insuring the death in service benefits. [4]

[Total 8]

- 5** You are the scheme actuary for a UK defined benefit pension scheme which provides a pension from age 60. The scheme is contracted-out of the State Earnings Related Pension Scheme on a salary related basis and it provides a pension of 1/90th of basic earnings in the year before retirement for each year of pensionable service.
- (i) Describe briefly the contracting-out conditions which have to be satisfied by the scheme in respect of pensionable service between 6 April 1988 and 5 April 1997. [3]
- (ii) Outline the tests which you would have made to enable you to certify that the scheme is suitable for contracting-out after 6 April 1997. [4]
[Total 7]
- 6** A member joined a UK final salary pension scheme five years ago. Describe briefly the information on the pension scheme that will have automatically been provided or will be available on request. [4]
- 7** A large UK plc has asked you to help them put together a benefits package for a potential new director.
- (i) List the types of arrangements that are available for the provision of the director's retirement benefits and describe the suitability of each. [10]
- (ii) You have been asked to produce some projections of retirement benefits for the new director, who is to be provided with a defined contribution arrangement. List the key assumptions which you would need to make. [3]
[Total 13]
- 8** A formal triennial actuarial valuation together with a Minimum Funding Requirement valuation has just been completed for a final salary pension scheme. Describe for these two valuations the differences in:
- (i) The purpose of the valuations [4]
- (ii) The actuarial methods used [3]
- (iii) The underlying assumptions used [2]
[Total 9]
- 9** You have been engaged to advise the Government of a country on the establishment of the primary tier of State pension provision. The country has no previous history of such State provision, and has enjoyed recent rapid economic progress. Briefly describe the issues that you would raise in your report. [10]

- 10** A contracted-out UK defined benefit pension scheme only guarantees increases to pensions in payment to the extent required by law. There is a practice of awarding discretionary increases around 75% of the Retail Prices Index (RPI) each year to pensions which are not subject to guaranteed increases. With the requirement to guarantee Limited Prices Indexation (LPI) of 5% a year or RPI, if less, for pensions in respect of service after April 1997 the Trustees want to guarantee LPI increases for pensions in respect of all service.
Set out the points you would make, as adviser to the company, concerning the trustees' proposal. [11]
- 11** Outline the method & assumptions used in the calculation of any "statutory surplus" under the Finance Act 1986. Briefly describe the ways this surplus can be eliminated. [7]
- 12** A UK company has decided that all future employees will be provided with pension and other associated benefits on salary up to a fixed limit. The limit will initially be set at £50,000 a year and this will increase in future in line with increases in the Retail Prices Index. On pay up to the limit normal benefit formulae will apply based on the employee's salary and, if applicable, status. If the employee earns more than the limit in any year the company will make a special (taxable) cash payment to the employee that year in lieu of the benefits foregone. The employee will have complete freedom to spend the cash payment as they see fit.
- (i) Set out the advantages and disadvantages to the company and employee of this approach. [7]
- (ii) Discuss the principles behind the calculation of the additional sum and the main elements of the basis you would use. [11]
- [Total 18]