

# EXAMINATION

11 September 2006 (am)

## Subject SA4 — Pensions and other Benefits Specialist Applications

*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 both questions, beginning your answer to each question on a separate sheet.*
6. *Candidates should show calculations where this is appropriate.*

### **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 the 2002 edition of the Formulae and Tables and your own electronic calculator.*

**1** You are the newly appointed Scheme Actuary to a scheme with both Defined Benefit (DB) and Defined Contribution (DC) sections. With effect from 1 January 1995, new employees were only offered membership of the DC section. Members of the DB section as at 31 December 1994 were given a limited opportunity to transfer to the DC section on what were described at the time as “enhanced terms”, or continue to earn final salary benefits in the DB section for future service.

A member who is due to retire on 1 January 2015 (at age 60) has approached the Trustees to query his latest benefit statement (as at 1 January 2005). He thinks that there must be a mistake in the calculations as the projected pension shown is so much lower than the illustration he got in 1995 when he decided to switch from the DB section and transfer his accrued benefits to the DC section.

You are attending a meeting with the Trustees tomorrow and have been asked to discuss this issue.

You have the following information available.

<i>Data Item</i>	<i>As used for 1995 Comparison</i>	<i>As used for 2005 Statement</i>
Age	40	50
Service completed	15 years	25 years
Basic Salary	£30,000	£60,000
DC Fund Value	£75,000 (enhanced)	£250,000

  

<i>Key Assumptions</i>	<i>DB &amp; DC Comparisons in 1995</i>	<i>DC Benefit Statement Projection in 2005</i>
Investment return (net of expenses)	10.0% p.a.	6.0% p.a. pre-retirement 4.5% p.a. post-retirement
Salary Increases	7.0% p.a.	4.0% p.a.
Inflation	4.5% p.a.	2.5% p.a.
Pension Increases	4.5% p.a.	2.5% p.a.
Annuity value at 60*	13.0	20.0

\* Allows for 50% spouse’s pension.

DB section benefits (unchanged since 1995):

- Pension formula at retirement is 1/60 of final basic salary for each year of pensionable service.
- A spouse’s pension of 50% of the member’s pension is payable on death after retirement.
- Pension increases in payment are in line with increases in the Retail Prices Index.
- The scheme is not contracted-out.
- Member contributions are 5% of basic salary.

DC contribution scale (unchanged since 1995):

- Member contributions are 5% of basic salary.
- Employer contributions are 10% of basic salary.

Normal Retirement Age is 60 in both sections.

- (i) Estimate the projected DB and DC pensions that would have been issued to the member in 1995, together with the 2005 DC benefit statement projection using the information provided. You should state any further assumptions or approximations you make, and show the benefits at retirement in both monetary terms and as a percentage of projected basic salary at retirement, based on total projected service to retirement. [6]
- (ii) Outline the key factors that have reduced the projected level of DC section benefits at retirement, estimating the impact of each and summarise your results in a table. [14]
- (iii) On the assumption that there are no errors in either set of calculations, set out the points you would cover with the Trustees in discussing whether the member may have a case for saying that he has been misled by the 1995 illustration of benefits. [12]
- (iv) Discuss the actions that the Trustees should take in relation to this individual. [6]
- (v) Discuss the wider implications of this case for the sponsoring employer. [6]
- [Total 44]

- 2** You have been appointed to advise a newly formed company which has won a contract to take over services from a government body. The new company will be employing 2,000 former employees of the government body.

Under the terms of the contract, the 2,000 employees must continue to accrue final salary pension benefits on their current benefit structure.

The new company has three options with regard to future benefit provision:

- Option 1 Employees may remain in their current Scheme. The new company will pay the same overall contribution rate as all other employers participating in that scheme.
- Option 2 The company could participate in an industry wide Scheme where administration costs are shared and investments are pooled. Each employer has an identifiable share of the scheme's assets and liabilities and pays a contribution rate appropriate to its part of the overall scheme.
- Option 3 The company could set up a new final salary Scheme for its employees.

The contract is initially for 5 years and will be reviewed at the end of that period.

- (i) Set out the advantages and disadvantages to the company of each of the three options. [15]

The company decides to set up a new Scheme.

- (ii) Describe three approaches that may be used to calculate the transfer value payable to the new Scheme in respect of members' accrued rights. [8]
- (iii) Outline the issues that employees will need to consider when deciding whether or not to transfer their existing rights into the new Scheme. [5]

The Trustees are inexperienced and naïve generally in pensions matters.

- (iv) Outline the key training requirements that you would recommend for the new Trustee board. [10]
- (v) Describe the issues that the Trustees should consider when establishing the investment strategy for the new Scheme. [8]

Following the first valuation of the Scheme, a significant deficit has emerged. An initial assessment of the covenant of the company has shown that it has strong positive cash flow, but poor asset backing.

- (vi) Describe the factors which the Trustees should consider in establishing the period over which the deficit is to be eliminated. [10]
- [Total 56]

**END OF PAPER**