

EXAMINATION

5 October 2010 (pm)

Subject ST4 — Pensions and other Benefits Specialist Technical

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 before 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 seven 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 from the approved list.

1 A fraudulent sponsoring employer operating in a certain country has used the assets of its pension scheme to fund a risky business venture. Consequently the State regulator is considering introducing a range of measures to enhance the security of the defined benefit pension schemes provided in that country. It has been suggested that events that relate to the integrity of the trustees or employer or any other events which increase the risk of benefits not being paid should be notified to the State regulator.

(i) Suggest six possible events relating to the employer that could be notified. [3]

(ii) Suggest six possible events relating to the trustees that could be notified. [3]

[Total 6]

2 The government of a country with limited private pension provision for its citizens is considering introducing a defined contribution State pension scheme. The objective of the scheme is to ensure a minimum level of pension benefits for all the country's citizens.

Discuss the issues relating to this new scheme that the government should consider under the following headings:

- Membership
- Contributions
- Administration costs
- Advantages for the members
- Disadvantages for the members or the government

[12]

3 A sponsoring employer is putting in place a defined contribution pension scheme to replace an existing defined benefit pension scheme. It has been decided to provide additional features that would offer some protection for members from adverse investment market movements.

(i) Discuss three distinct design features that could be adopted and the likely impact of adverse movements in investment markets on each of these. [9]

(ii) Outline the funding implications of each of the three benefit design features identified in part (i). [3]

[Total 12]

4 A member of a defined benefit pension scheme is due to retire in the near future. He is considering whether he should exchange some or all of his pension for cash.

- (i) Set out the issues the member might consider in deciding how much pension to exchange for cash at retirement. [4]

The member is concerned that the level of cash available for pension exchanged is low relative to the level of cash being offered by other pension schemes. He raises these concerns with the trustees of his pension scheme.

Having recently reviewed the scheme's commutation factors with their actuary, the trustees are satisfied that they are appropriate and have asked their actuary to help them draft a response to this member.

- (ii) Outline the points to be included in the trustees' response, highlighting possible reasons why commutation factors vary from scheme to scheme. [11]
[Total 15]

5 The trustees of a large defined benefit pension scheme are about to undertake a formal actuarial funding valuation. The scheme comprises manual factory workers, administration and management staff.

- (i) Outline the information that the trustees should consider in setting the valuation assumptions. [4]
- (ii) Outline how each of the key financial and demographic valuation assumptions may be derived. [10]

At the valuation date investment markets had been particularly volatile.

- (iii) Discuss the implications of this on the valuation process. [4]
[Total 18]

6 Company A and Company B operate mature defined benefit pension schemes. Negotiations are currently underway for Company B to purchase Company A.

- (i) Explain how the existence of the pension schemes could complicate the negotiations. [5]
- (ii) Discuss the key issues that Company B should consider regarding Company A's pension scheme. [6]
- (iii) Discuss the key principles that the trustees of the pension schemes should consider in relation to this possible transaction. [6]
[Total 17]

- 7 A final salary pension scheme provides a member's pension related to service and salary close to retirement. It also provides a package of benefits for dependants on death both before and after retirement. Pensions in payment are reviewed annually and increased from time to time having regard to increases in the cost of living.

The 2009 triennial valuation has recently been completed. Since the previous valuation in 2006 there has been a major redundancy exercise. This resulted in a number of scheme members leaving service or retiring early. The following communication to scheme members covering both the 2009 valuation and the 2006 valuation has been provided.

	<i>2009 valuation</i>	<i>2006 valuation</i>
Ratio of assets to liabilities:		
• Ongoing funding basis	80%	90%
• Assuming accrued benefits are purchased on the open market	50%	80%
Recommended contribution rates (% salaries)		
• Employer	15%	12%
• Employee	5%	3%

Some members have asked the trustees of the pension scheme to explain the results of the recent valuation. In particular they have asked whether they should be reassured or concerned by the results. The trustees agree to arrange a more detailed communication to be issued to all scheme members.

Discuss the items that might be covered within such a communication. Your answer should include:

- the additional information that might be provided
- a description of the alternative actuarial bases
- a justification for the increased contribution rates

[20]

END OF PAPER