

INSTITUTE AND FACULTY OF ACTUARIES



EXAMINATION

12 April 2019 (pm)

Subject SA4 – Pensions and Other Benefits Specialist Advanced

Time allowed: Three hours and fifteen minutes

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*
2. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*
3. *Mark allocations are shown in brackets.*
4. *Attempt all questions, begin your answer to each question on a new page.*
5. *Candidates should show calculations where this is appropriate.*

Graph paper is NOT required for this paper.

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** (i) List the objectives that an employer is likely to have when designing a new occupational pension scheme. [6]

A defined benefit pension scheme provides a pension that is guaranteed to increase in payment in line with price inflation. The sponsor has proposed to the trustee that members should be offered at retirement an option to convert their pension to one which increases at the minimum rate required by legislation.

- (ii) Discuss aspects of the scheme design which could offer some protection to the members against the impact of price inflation to the members both before and after retirement. [6]
- (iii) Set out the factors the sponsor might consider when deciding the terms of the proposal. [5]
- (iv) Discuss the factors that the trustee should consider when deciding whether to agree to the sponsor's proposal. [10]
- (v) Discuss the issues that a member should take into consideration when deciding whether to accept the option at retirement. [8]

[Total 35]

- 2** The trustees of a defined benefit scheme which is sponsored by a medium-sized company wish to establish a framework for assessing and monitoring the sponsor covenant. They have asked their actuary for advice on the principles for this framework.

- (i) Set out the points that might be covered in the actuary's advice. [5]
- (ii) Describe how the actuary should take the strength of the sponsor covenant into account when providing funding advice to the trustees. [5]

To date, the funding advice provided by the actuary has been based on an assessment of the sponsor covenant as being 'strong'. A profit warning has just been issued by the sponsor and, as a result, the share price has halved overnight. The chairman of the trustees has called an emergency meeting of the trustees for the following day, and asked the actuary to attend the meeting.

- (iii) Suggest other attendees who should be invited to provide input at the meeting. [2]

At the meeting, it was decided to ask the actuary to prepare a paper outlining the investigations that the trustees should consider.

- (iv) Set out the points that the actuary should include in the paper. [7]

As a result of the investigations, the trustees have concluded that the covenant should now be assessed as 'weak'.

(v) Outline the possible actions that may be available to the trustees. [7]

(vi) Comment on the advice that the actuary would need to provide in order for the trustees to take the actions in part (v). [4]

[Total 30]

3 A manufacturing employer sponsors a well-established defined benefit pension scheme which is open to future accrual.

(i) Outline the actions the employer could take to reduce the risks to its financial position arising from the scheme. [10]

The employer proposes that the scheme's managers transfer as many of these risks as possible to an external insurance company.

(ii) Outline the types of insurance products which may be available to the scheme's managers. [5]

(iii) Describe the possible implications of the employer's proposal for the members of the scheme if the scheme's managers use each of the products in part (ii) above. [15]

The scheme's managers have agreed to insure the spouse's death in service pension with an external insurer. The calculation of the pension is based on the member's prospective service to normal retirement age.

(iv) Discuss the impact that having such insurance in place would have on the actuary's funding advice to the scheme's managers. [5]

[Total 35]

END OF PAPER