INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

19 April 2023 (am)

Subject SA4 – Pensions and Other Benefits
Specialist Advanced

Time allowed: Three hours and twenty minutes

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator.

If you encounter any issues during the examination please contact the Assessment Team on T. 0044 (0) 1865 268 873.

© Institute and Faculty of Actuaries

1 The government of a developed country wishes to improve the level of private pension provision, particularly for low earners, which has historically been very low.

(i) Suggest possible ways that the government could encourage private pension provision. [6]

The government has now decided to introduce an auto-enrolment system, where employers will have to automatically enrol their employees into a pension scheme.

(ii) Set out the issues the government will have to consider when setting out the framework for this new system. Your answer should focus primarily on:

(a) eligibility.

(b) contribution levels.

(c) accumulation and decumulation of funds.

(d) regulation of the new framework.

[21]

The government has recently introduced a policy to commit to reduce climate change and wishes to use the auto-enrolment scheme as a way of contributing to this policy. It has proposed that any contributions invested in funds that meet the government's climate change policy criteria should receive a bonus of 10% each year.

(iii) Comment on the government's proposal, including how it may work in practice. [8]

[Total 35]

2 A company in a developed country sponsors a large defined benefit scheme ('the scheme'). The scheme has been closed to future service for several years. All of the benefits in the scheme are linked to inflation, both in deferment and payment. The scheme had a small surplus at the last funding valuation.

The company is about to open a new section in the scheme. The new section will be open to all of its current workforce. It will be contributory and pay a pension of $500 a year in retirement for each year of service accrued. There will be no increases in deferment or payment. The new section will be created under the same trust as the current scheme, but in a different section, with the assets ring-fenced.

(i) Discuss the factors that will influence the investment strategies for the two sections, highlighting, where relevant, the key differences between the sections. [16]

Before accrual has started in the new section, the scheme has just completed a triennial valuation. The results, on a number of bases, are as follows:

	Funding ($000,000)	*Self-sufficiency ($000,000)*	*Buyout ($000,000)*
Assets	1,000	1,000	1,000
Deferreds	350	450	550
Pensioners	550	550	575
Total	**900**	**1,000**	**1,125**
Funding level	111%	100%	89%

Following the valuation, the trustees are keen to reduce the volatility in the scheme's funding position and wish to move to the self-sufficiency basis. The scheme's current investment strategy is 70% in equities and 30% in bonds, and the trustees have proposed moving to a 100% bond strategy.

The sponsor has responded to say that the current investment strategy should remain unchanged. They say that the covenant is strong, they understand the additional risks involved and they wish to benefit from the additional returns from the equities.

(ii) Set out the advantages and risks of:

(a) the trustees' proposal.

(b) the sponsor's response.

[8]

(iii) Suggest, with reasons, TWO alternative investment strategies that may satisfy both parties. [4]

Before any changes to the investment policy have taken place, the company loses its largest contract, supplying office equipment to a global bank, and issues a profit warning.

(iv) Discuss how the trustees may respond to the profit warning. Include any actions the trustees could take in the short term. [6]

Within 1 year of opening the new section, the sponsor decides to close that section to future service.

(v) Describe the process for discontinuing the new section, including the options available for current members given their short service. [12]

One of the trustees has suggested that members of the new section be transferred into the old section, with deferred pensions based on the member's contributions.

(vi) Discuss the practicalities of this suggestion, including how the deferred pension could be calculated. [7]

A year later, the company has lost further contracts and is declared insolvent.

(vii) Set out the main steps the trustees will need to take to secure members' benefits. [12]

[Total 65]

END OF PAPER