

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

20 April 2022 (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.

- 1**
- (i) State what is meant by ‘auto-enrolment’ in the context of a pension arrangement. [1]
 - (ii) Outline the advantages and disadvantages of auto-enrolment pension schemes. [6]

A general guideline for an appropriate amount to save to achieve a sufficient income in retirement is that an individual starting a pension should save half their age in years as a percentage of gross income and continue to save at this rate until retirement. For example, a 30-year-old starting to save for retirement should save 15% of their income every year.

- (iii) Discuss the suitability of this rule, with reference to savers aged 20, 40 and 60. [10]

A developed country allows tax relief on contributions paid by individuals into approved pension arrangements at individuals’ marginal tax rates. Individuals currently pay 20% income tax on earnings below a specified threshold and 40% on earnings above that threshold. This means that for each \$80 a lower-rate taxpayer contributes, the government tops it up to \$100. For a higher-rate taxpayer, a \$60 contribution would be topped up to \$100.

The government is proposing to introduce a flat-rate percentage tax relief whereby all contributions from individuals attract tax relief of 30%, irrespective of the marginal tax rate.

- (iv) Set out the advantages and disadvantages of a single rate of tax relief. [6]
- (v) Comment on how your answer to part (iii) may change in light of the government’s proposal. [4]

[Total 27]

- 2 (i) Describe what is meant by the term ‘responsible investment’. [1]

Pension schemes are increasingly aware of the importance of Environmental, Social and Governance (ESG) considerations.

- (ii) (a) List the main factors that are typically reviewed in ESG considerations.
(b) Explain their relevance to pension scheme investments.

[7]

A mature defined benefit pension scheme has just completed a triennial valuation. The scheme has a large surplus on a Technical Provisions basis. The trustees are reviewing the scheme’s investment strategy with the aim of reducing the long-term reliance on the sponsor.

- (iii) Discuss the issues that the trustees will need to consider when deciding on a new investment strategy. [10]

The scheme sponsor is a sports club whose income relies heavily on ticket sales, hospitality and sponsorship. It has asked the trustees to make climate change an important factor in the investment review.

- (iv) Identify the ways that the employer covenant may be affected by climate change. [4]

The sponsor has identified a managed fund that invests in global equities, limited to companies with strong ESG values. The sponsor has asked the trustees to consider investing in this fund.

- (v) Discuss the issues that the trustees will need to consider when deciding whether this investment is appropriate. [8]

[Total 30]

- (iii) Estimate the following, taking account of the pensionable earnings cap:
- (a) The SCR and Actuarial Liability for each member
- (b) The SCR and Actuarial Liability for the scheme as a whole, based on total uncapped pensionable salaries of \$22.5m.

You should state any other assumptions that you make. [10]

A full valuation is performed, allowing for the earnings cap. The Actuarial Liability for active members reduces to \$140m and the SCR reduces to 22%.

- (iv) Suggest reasons why your estimates in part (iii) may differ from the calculated results including why the SCR has fallen by proportionately more than the Actuarial Liability. [5]

A year after the triennial valuation, the earnings cap is introduced and a funding update is produced. The results are set out in the table below:

	<i>\$m</i>	<i>Assumption</i>	<i>% p.a.</i>
Assets	600	Pre-retirement discount rate	2.0
		Post-retirement discount rate	1.0
Actives	180	Salary increases	3.2
Deferreds	235	Inflation linked increases	2.2
Pensioners	250		
Total liabilities	665		
Deficit	65		

Inflation over the last year has been 3.0% and earnings increases have averaged 2.0%. Contributions have been paid at 40% of pensionable earnings.

- (v) Perform an analysis of surplus from the triennial valuation to the funding update. You should state any assumptions that you make. [10]
- (vi) List additional experience items that may have contributed to the change in funding position. [3]

The sponsor is concerned that it is now required to make deficit payments, as well as accrual costs. It is considering closing the scheme, either to new entrants or to all future accrual.

- (vii) Explain why closing the scheme, under either basis, may not address the sponsor's concerns. [6]

[Total 43]

END OF PAPER