

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2022

SP4 - Pensions and Other Benefits Specialist Principles

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the Specialist Advanced (SA) and Specialist Principles (SP) subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Sarah Hutchinson
Chair of the Board of Examiners
July 2022

A. General comments on the *aims of this subject and how it is marked*

The aim of the Pensions and Other Benefits Specialist Principles subject is to instill in successful candidates the ability to apply, in simple situations, the mathematical and economic techniques and the principles of actuarial planning and control needed for the operation on sound financial lines of providers of pensions or other employee benefits.

This subject examines the ability of candidates to apply core actuarial techniques and concepts, together with specific knowledge of pensions and other benefit arrangements to simple, but practical situations.

The Examiners therefore look for candidates to apply their knowledge of the Core Reading to the specific situation that the Examiners asked, having read the question carefully. Many candidates write around the subject matter of the question in more general fashion or focus on one aspect of the issue at great length, in either case gaining few of the marks available.

Good candidates demonstrate that they have used their time well - an attempt to get a logical flow is a big advantage in making points clearly and without repetition. This also enables candidates to use the latter parts of questions to generate ideas for answers to the early parts (or use their solutions to earlier parts of questions to create a structure for latter parts). Time management is important so that candidates give answers to all questions that are roughly proportionate to the number of marks available. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

B. Comments on *candidate performance in this examination.*

This was a well-balanced exam paper and well-prepared candidates were able to score well and pass. The pass mark of 64, reflects the performance of a minimally competent candidate.

It is very important that candidates consider all aspects of the question and read the preamble fully. By using all of the information available, candidates can ensure they give a full answer. Giving just a little more to clearly show depth can turn a close fail into a pass. The questions are set so that it should take approximately twice as long to answer a 10 mark question as a 5 mark one. Answers should therefore be similarly proportionate.

Candidates are reminded to study the whole syllabus as all areas may be tested. Candidates are reminded to pay attention to the command verbs and practise these types of questions as part of their preparation. A list of what is expected for each command verb is available on the IFoA website.

C. Pass Mark

The Pass Mark for this exam was 64
137 presented themselves and 75 passed.

Solutions for Subject SP4 - April 2022

Q1

(i)

Documents relating to the current and past operation of the Scheme (max 3 marks)

| | |
|--|-----|
| The Scheme Rules | [½] |
| Member announcements / special terms for specific members | [½] |
| Minutes from trustee meetings in the inter-valuation period | [½] |
| Scheme booklet / benefit summary | [½] |
| Details of current / historic discretionary practices | [½] |
| For example discretionary pension increases | [½] |
| Current actuarial factors | [½] |
| Details of the current investment or funding strategy | [½] |
| Details of previous actuarial advice relevant to the valuation | [½] |
| For example the previous valuation report | [½] |

Information relating to the future operation of the Scheme (max 3 marks)

| | |
|---|-----|
| Views of future discretionary practices | [½] |
| Any planned / proposed changes to the funding or investment strategy | [½] |
| Details of any potential/proposed changes to benefit entitlements | [½] |
| 1 example e.g. closure to accrual / change in pension increases / change in NPA etc | [½] |
| General / Promotional salary information | [½] |
| Changes in legislation affecting the Scheme | [½] |
| Information on the Employer covenant | [½] |
| For example events that may arise affecting the sponsors ability or willingness to fund the Scheme | [½] |
| Details of any events that would affect employment prospects of Scheme members e.g. a redundancy exercise | [½] |

Data relating to the current financial position of the Scheme (max 3 marks)

| | |
|---|-----|
| (Audited) accounts | [½] |
| Market value of assets | [½] |
| Relevant market data for valuing liabilities (e.g. gilt yield curves / inflation curves) | [½] |
| Relevant demographic data for valuing liabilities (e.g. mortality tables) | [½] |
| Details of cashflows since previous valuation | [½] |
| 1 example e.g. pensions paid / contributions received | [½] |
| Details of any special events since the previous valuation e.g. incentive exercise | [½] |
| Details of any insurance policies to be valued | [½] |
| Membership data for current members of the scheme | [½] |
| Membership data for prospective future members of the scheme | [½] |
| Max 2 examples of relevant member data e.g. sex / date of birth / pension amounts / service dates / etc | [1] |

[Marks available 15½, maximum 8]

(ii)

| | |
|--|-----|
| Reconciliation checks | |
| Membership movements (in each category) could be reconciled to the previous valuation data | [½] |

| | |
|---|---------------------------------|
| Or to annual accounts | [½] |
| Special care should be given to check the existence of new members | [½] |
| It is often usual to request data for all members of the scheme at any stage since the previous valuation | [½] |
| Roll forward of previous data (by category) allowing for known events such as pension increases to compare against current data | [½] |
| Consistency checks | |
| Data items can be checked for consistency against alternative sources. For example: Salary related contribution amounts in the accounts could be compared to salary data and known contribution rates or total pensions paid could be compared to the amount in the scheme accounts | [½] |
| Implied investment return could be compared to any monitoring reports | [½] |
| Previous data - for example wouldn't expect dates of birth to change between valuations | [½] |
| Reasonableness checks | |
| Minimum/Maximum "sense" checks | [½] |
| For example on benefit levels | [½] |
| Any relevant example e.g. wouldn't expect negative pensions | [½] |
| Or ages | [½] |
| Any relevant example e.g. would expect a maximum age for children based on definitions in scheme rules | [½] |
| Ensure there are no blanks where data is expected | [½] |
| Spot checks | |
| Random spot checks on individual members | [½] |
| For a large scheme, this might be targeted at the members with the highest liabilities | [½] |
| Because the scheme is large, checks might be done on a summary basis rather than an individual basis as full validation may not be possible... | [½] |
| however this may impact the reliability of the data | [½] |
| and may miss significant differences between the nature of benefits that are grouped together | [½] |
| | [Marks available 10, maximum 7] |
| (iii) | |
| Member experience since the previous valuation | |
| There may have been no impact on member experience since the previous valuation | [½] |
| For example if the country / industry was not really affected by the pandemic | [½] |
| There may have been more deaths than expected based on the assumptions adopted at the previous valuation | [½] |
| This may have impacted certain demographics more than others e.g. retired males | [½] |
| which would lead to a surplus relative to the expected position at the current valuation | [½] |
| The impact of death in service depends on how the funding reserves compares to the value of the death benefit... | [½] |
| and if the benefit was insured this would release surplus | [½] |
| As a secondary impact, there may also be fewer members with a surviving spouse on death | [½] |
| Which would lead to a surplus relative to the expected position | [½] |
| There may have been a higher proportion of (ill health) early retirements than typical | [½] |

| | |
|---|-------|
| The impact would depend on the factors relative to the funding basis | [1/2] |
| Given the size of the scheme it is likely that there would be some impact | [1/2] |
| But the overall impact may be less than a smaller scheme as it averages across the membership | [1/2] |
| There may have been significant redundancies / withdrawals over the inter-valuation period | [1/2] |
| So the proportion of non-active members in the scheme would increase relative to the active population | [1/2] |
| Which may reduce the expected duration of the liabilities | [1/2] |
| The impact on the financial position of the Scheme would depend on the revaluation assumption relative to the salary increase assumption... | [1/2] |
| ... and if there were any special terms for members on redundancy | [1/2] |
| There may have been lower than expected salary increases | [1/2] |
| Which would lead to a lower than expected liability | [1/2] |
| There may be a demographic impact as a result of members re-evaluating life choices | [1/2] |
| For example an increase in early retirements / cash commutation... | [1/2] |
| the impact of which depends on the factor terms relative to the funding basis | [1/2] |
| | |
| Assumptions for valuing liabilities | |
| If the assumptions are market related, they will reflect the market reaction to the pandemic | [1/2] |
| The inflation assumption may reflect changes to supply/demand as a result of the pandemic | [1/2] |
| For example labour shortages may lead to supply issues and inflationary pressure | [1/2] |
| The pandemic is likely to have led to an increase in demand for "safe" assets such as government bonds | [1/2] |
| This would result in a decrease in government bond yields | [1/2] |
| Which may increase the liabilities if the discount rate is based on government bond yields | [1/2] |
| Although this may be mitigated by an increase in the supply of government bonds to raise finance to meet the costs of the pandemic | [1/2] |
| | |
| Any changes to the investment strategy as a result of the pandemic should be reflected in the valuation assumptions. | [1/2] |
| The mortality base table assumption may be amended to reflect recent experience | [1/2] |
| Or it may be left unchanged if the actuary considers the recent experience to not be representative of the future | [1/2] |
| There may be a decrease in the long term mortality improvement assumption if there is evidence that the pandemic has led to increased morbidity in the population | [1/2] |
| Or there may be an increase in the long term mortality improvement assumption if it is expected that the remaining population is on average now more healthy than before the pandemic | [1/2] |
| The pandemic may have had an impact on the employer covenant | [1/2] |
| If the covenant has weakened then it may be appropriate to increase the level of prudence in the assumptions | [1/2] |
| The level of contributions agreed as part of the valuation should also reflect the covenant | [1/2] |
| The impact of the pandemic on the sponsor may be mitigated by any government support available | [1/2] |
| The salary increase assumption should be adjusted to reflect the latest information from the sponsor | [1/2] |
| If the maturity of the scheme / duration has shifted significantly then this should be | |

reflected in the assumptions [½]
 It may be there is no impact on the assumptions if the pandemic is considered a one off event [½]

Asset valuations

There may be no impact on the assets if they are sufficiently diversified [½]
 There is likely to have been significant economic impact as a result of the pandemic, for example it may have led to a recession [½]
 There may be no impact on the funding level if the scheme is fully hedged [½]
 For example a buy-in policy [½]
 Or LDI assets [½]
 There is likely to have been a significant fall in equity values [½]
 As the pandemic is likely to have led to distressed economies and strain on company balance sheets [½]
 Although this is likely to be very industry specific [½]
 For example shares in pharmaceutical companies or supermarkets may have significantly increased [½]
 While shares in companies relating to travel or hospitality may have significantly decreased [½]
 Global diversification may have reduced any impact as the pandemic would effect different economies in different ways [½]
 There is likely to have been an increase in value of government bonds [½]
 There is likely to have been an increase in the number of defaults on corporate bonds [½]
 There may have been a fall in commercial property values as companies move to working from home [½]
 There may be an increase in residential property values to reflect (particularly in the countryside) to reflect home working / life choices [½]
 There is likely to have been an increase in the number of defaults on corporate bonds [½]
 Depending on the period of time since the pandemic, there may have been a recovery in some markets, which would dampen the valuation impact [½]

Other impacts

The funding approach may have changed as a result of the pandemic [½]
 For example a change in long-term target [½]
 Periods of long-term absence may impact on the level of ongoing accrual [½]
 Potential changes to the scheme should be allowed for e.g. changes in eligibility criteria for ill-health retirement. [½]

[Marks available 31½, maximum 12]

[Total 27]

This question was generally well answered. Candidates who gave a broad range of responses scored well.

Q2

(i)

The government should consider who will be eligible to receive the benefit [½]
 Whether membership will be universal / if there will be any restrictions [½]
 For example it may be means tested [½]

| | |
|---|-------|
| How the benefit will be financed? | [1/2] |
| Will it be funded? | [1/2] |
| If so, where will the funds be invested? | [1/2] |
| Who will be required to contribute? | [1/2] |
| The level of contributions | [1/2] |
| The form of contributions e.g. flat / earnings related | [1/2] |
| If there are any minimum/maximum earnings that contributions apply to | [1/2] |
| The level and nature of the benefit | [1/2] |
| Whether/how it will increase over time | [1/2] |
| What age it should be paid from | [1/2] |
| The macroeconomic impact of the benefit provision | [1/2] |
| Any political goals e.g. redistribution of wealth | [1/2] |
| Popularity | [1/2] |

Practicalities (max 1 mark for two distinct examples):

| | |
|---------------------------|-------|
| Communication | [1/2] |
| Administration | [1/2] |
| Cost of set up | [1/2] |
| Governance / legal issues | [1/2] |

[Total marks available 9, maximum 4]

(ii)

Level of benefits (max 3 marks)

| | |
|---|-------|
| Median earnings may not be an appropriate reference for retirement benefits | [1/2] |
| An appropriate amount may be higher than median earnings given that the scope for other retirement saving is limited | [1/2] |
| The distribution of earnings is likely to be skewed to lower earning jobs in a developing country. | [1/2] |
| Individuals may need less income in retirement than when in employment. | [1/2] |
| The regulatory regime may not be developed enough to record an accurate measure of median earnings | [1/2] |
| And consideration should be given to whether this definition includes/excludes elements of pay such as overtime or bonuses. | [1/2] |
| There is likely to be a lag between measuring median earnings and increasing benefits | [1/2] |
| This may be significant in a developing economy if wages are rising quickly | [1/2] |
| A uniform rate of benefits for all does not target funds at those most in need | [1/2] |
| But can ensure a minimum standard of living for all | [1/2] |
| Consideration should be given to whether and how benefit outgo is indexed - in line with median earnings or by another index and any floors (e.g. is it reduced if median earnings decreases) | [1/2] |

Eligibility (max 3 marks)

| | |
|---|-------|
| There are likely to be significantly more citizens eligible for the benefit than are funding it | [1/2] |
| And therefore it may be viewed as inequitable by those contributing the most | [1/2] |
| This may meet a government / political aim in redistribution of wealth | [1/2] |
| But it may also be politically unpopular | [1/2] |
| It may be considered equitable because all citizens are treated in the same way | [1/2] |
| This would make the benefit simpler to administer | [1/2] |
| There may be practical issues around paying the benefit to all citizens | [1/2] |
| For example the census data may be inaccurate | [1/2] |

And some citizens are unlikely to have bank accounts [½]
 Consideration should be given to migration / whether benefit is payable to non-citizens [½]
 Consideration should be given as to whether those already over age 70 are immediately eligible to receive a benefit or not [½]

State Pension Age (max 3 marks)

The life expectancy in the developing country may be less than 70 years [½]
 For example the health / social care system is likely to be less developed [½]
 In which case the usefulness of the benefit is likely to be limited for most citizens [½]
 Except the wealthy who are likely to have a larger expectation of life [½]
 Which would mean the benefit is poorly targeted if redistribution of wealth is the aim [½]
 But this would make the benefit cheaper to provide than if the state pension age was lower [½]
 A developing economy is much more likely to have more manual jobs, where people are likely to need to retire earlier (e.g. due to health reasons) [½]
 And those who retire early may not have adequate income unless a bridging pension is provided [½]

Funding (max 3 marks)

Concerns around benefit fraud may be more significant in a country without an established benefits system. [½]
 There is a disconnect between the population funding the benefit and the population receiving the benefit [½]
 To the extent that there are generational shifts in demographics, this would impact the funding level / lead to inter-generation unfairness [½]
 It may be politically unpopular to raise taxes [½]
 An alternative would be to ring-fence contributions for benefit provision (e.g. similar to the UK's National Insurance contribution) [½]
 Both contributions and payments are linked to earnings and so are likely to be well matched [½]
 A 10% contribution may be unaffordable for some citizens [½]
 And may reduce spending / economic growth [½]
 Consideration should be given as to what happens when the level of income in a particular year does not match the level of outgo [½]
 Is the difference picked up from general taxation [½]
 Or is a reserve established e.g. from any excess funds [½]
 And if so, how will these funds be invested [½]
 If domestic, then there may not be sufficient funds available [½]
 If international then this may not meet the government's macroeconomic aims [½]
 Particular consideration should be given to funding the first pension payroll, which may occur before tax contributions can be collected [½]
 Other (max 1 mark)

The government may not be able to communicate the new benefit to all citizens, depending on the sophistication of the communication network [½]
 The scheme is likely to be significantly funded by a small number of significant earners who would not materially benefit from the scheme [½]
 Which may lead to such individuals relocating / managing tax affairs to limit liability [½]
 Or deter investment in the country [½]
 Which may have a macroeconomic impact [½]

The government may also want to encourage private provision to limit the reliance on state benefits [½]
 Total marks available 13 , maximum 10]

(iii)

| | |
|--|-----|
| Mortality tables appropriate for the population | [½] |
| To establish the proportion of the population likely to reach state pension age | [½] |
| And to value the benefit as it is payable for life | [½] |
| The median earnings | [½] |
| So the expected level of the benefit is known | [½] |
| Total taxable earnings | [½] |
| To establish the expected level of contribution income | [½] |
| Wage growth | [½] |
| To establish if the rate is expected to remain suitable for a period of time (as it may be unpopular to change tax rates multiple times) | [½] |
| May also consider changes in wage distribution (i.e. if median earnings will increase at a different rate to total taxable earnings) | [½] |
| Population data | [½] |
| To establish the number of beneficiaries | [½] |
| both now and projected into the future | [½] |
| Allowing for new entrants as required | [½] |
| e.g. migration and birth rates | [½] |
| Individual data is unlikely to be available | [½] |
| Sufficient data to establish an expectation of how the benefit may increase over time | [½] |

[Marks available 8½, maximum 6]
[Total 20]

Part (i) was well answered but candidates did less well, on average, on parts (ii) and (iii).

For parts (ii) and (iii) the responses were generally lacking in sufficient breadth to score highly. Candidates that structured their answer to part (ii) scored relatively better than those that didn't.

Q3

(i)

| | |
|---|-----|
| A cash balance scheme is a form of hybrid pension scheme | [½] |
| The minimum cash sum at retirement is determined by a defined formula | [½] |
| Which may be based on a fixed accrual rate of pensionable salary | [½] |
| OR linked to the age / service of a member | [½] |
| Contributions can be paid by the sponsor and/or the individual member | [½] |
| And each contribution is indexed up to retirement in a specified way | [½] |
| For example based on a fixed index | [½] |
| OR the investment return on the Scheme's assets | [½] |
| The cash fund at retirement is used to secure benefits | [½] |
| This is typically secured by purchase of an annuity | [½] |

[Marks available 5, maximum 3]

(ii)
 Actuarial Liability

The discounted value of the expected cash payment at retirement [½]
 For active members, the value relates to the cash accrued to the date of the valuation [½]
 Projected to retirement at the assumed rate of increase [½]
 And discounted to the date of valuation using the assumed discount rate [½]
 For deferred members, the methodology is the same although the rate of increase to retirement may be defined differently and this should be reflected in the assumption. [½]
 As the cash fund at retirement is used to secure benefits outside of the scheme, there are no pensioner members [½]

Standard Contribution Rate

The contribution rate is determined as that necessary to cover the cash sum accruing based on the defined formula over the control period following the valuation date for active members. [½]
 With no allowance for the surplus in the Actuarial Liability [½]
 The value of the cash sum is projected to retirement at the assumed rate of increase and discounted to the date of the valuation using the discount rate. [½]
 The contribution rate may be determined as a percentage of the salary roll of the active members [½]
 And may be split between the company and employees [½]

Modified Contribution Rate

The contribution rate obtained by adjusting the Standard Contribution Rate to allow for the Actuarial Surplus [½]
 There are various ways of amortising surplus [½]
 The method used should be appropriate for the purpose [½]
 As the scheme has excess assets, the MCR will be lower than the SCR [½]

[Marks available 7½, maximum 5]

(iii)

Before retirement

The risks lie primarily with the sponsor [½]
 Investment risk [½]
 Unless the cash lump sum is indexed to scheme investment performance [½]
 Contribution risk [½]
 Increase in costs for example due to significant salary rises [½]
 Cashflow risk to ensure contributions can be paid [½]
 Expense risk in managing the scheme [½]
 Legislation/governance risk in managing the scheme [½]
 Liquidity risk to pay lump sum amounts on retirement [½]
 Members are exposed to inflation risk if the benefit doesn't retain its value in real terms [½]
 Members are also exposed to covenant/funding risk [½]

After retirement

The risks lie primarily with the member [½]
 The exact risk profile depends on how the member uses the cash pot [½]
 If an annuity is to be purchased, the member is exposed to annuity pricing fluctuations [½]
 But once the annuity is secured, all risks are passed to the insurer [½]
 Except for the covenant risk which is maintained by the member (but is expected to be small) [½]
 If the member invests the cash balance into a drawdown vehicle they are exposed to investment/inflation risks [½]

And longevity risk if the cash sum is completely used up before they die [½]
 [Marks available 9, maximum 6]
[Total 14]

Part (i) of this question was generally well answered with candidates showing good knowledge of cash balance schemes.

For part (ii) the question was asking for candidates to provide definitions in the context of the cash balance scheme. Candidates who gave broad or pension-related definitions were unable to score full marks.

Those candidates who recognised the distinction in the features of the cash balance scheme pre- and post-retirement scored better than those who gave more generic responses in part (iii).

Q4

(i)

A strategy and practice to incorporate environmental, social and governance factors in investment decisions and active ownership [1]

It is not necessarily only investing in companies and projects that are expected to have an explicit positive impact on society [½]

An ESG strategy typically involves consideration of the following factors

Environmental (max 1 mark for two distinct examples)

Climate change [½]

Resource depletion [½]

Waste [½]

Pollution [½]

Deforestation [½]

Desertification [½]

Carbon emissions [½]

Water management [½]

Social (max 1 mark for two distinct examples)

Human rights [½]

Modern slavery [½]

Child labour [½]

Working conditions [½]

Employee and local community relations [½]

Migration [½]

Social unrest [½]

Governance (max 1 mark for two distinct examples)

Bribery and corruption [½]

Voting practices [½]

Executive pay [½]

Board diversity and structure [½]

Political lobbying and donations [½]

Tax strategy [1/2]
 [Marks available 4½, maximum 4]

- (ii)
- Scheme managers have a fiduciary duty to act in the best interests of beneficiaries [1/2]
 - They also have a responsibility to ensure the scheme has sufficient assets to meet benefit payments as they fall due [1/2]
 - And to maximise the return on the fund, subject to an acceptable degree of risk [1/2]
 - The managers should therefore consider the financial impact of ESG investment [1/2]
 - The managers should consider the current level of ESG investments in the strategy before increasing the exposure. [1/2]
 - The managers may consider whether the assets are held in pooled or segregated funds, and the governance consequences of this. [1/2]
 - The managers should also consider the level of matching desired and whether there are sufficient variety of ESG assets to achieve this [1/2]
 - Taking into account the nature/currency/certainty/term of the liabilities [1/2]
 - An ESG strategy may restrict the range of assets available for investment [1/2]
 - Which may impact negatively on performance [1/2]
 - And increase diversification risk [1/2]
 - However there are arguments that support the view that incorporating ESG factors can improve performance through increasing returns and / or reducing risk e.g. [1/2]
 - Reducing costs through more efficient use of raw materials [1/2]
 - Subject to less financial impact if governments impose pollution taxes or minimum wages [1/2]
 - Benefit from government incentives and subsidies designed to encourage global goals on climate / energy / sustainable development [1/2]
 - Avoid reputational damage from controversial practices e.g. modern slavery [1/2]
 - See greater returns arising from better working conditions for staff which aids recruitment, retention and motivation [1/2]
 - Consideration can be given to both maximising ESG incentives and minimising penalties for non ESG investments [1/2]
 - Pension schemes typically have a long duration and so may be exposed to climate change risks e.g. [1/2]
 - Physical risks as a consequence of e.g. increases in temperature / sea levels rising [1/2]
 - Transition risks as economies shift from fossil fuel use to a renewable infrastructure [1/2]
 - Liability risks relating to claims from third parties seeking compensation for loss suffered as a result of climate change [1/2]
 - ESG investment may help to mitigate some of these risks [1/2]
 - The managers should consider the ongoing charges / expenses / taxation on the fund as it is the net return that is important for the scheme [1/2]
 - There may be regulatory requirements / restrictions on the assets the scheme can invest [1/2]
 - Or professional guidance to consider [1/2]
 - The strategy should meet the cashflow needs of the scheme by considering such issues as liquidity/marketability of the assets [1/2]
 - The strategy should be sufficiently diversified [1/2]
 - They should consider the costs of transitioning assets e.g. [1/2]
 - Advice costs [1/2]
 - Transition expenses [1/2]
 - They should consider the views of the sponsor [1/2]
 - And may also consider the views of members [1/2]

[Marks available 16½, maximum 7]

| | |
|--|---------------------------------|
| (iii) | |
| Disclosure requirements | [½] |
| For example in scheme accounts | [½] |
| Or in member communications | [½] |
| Assigning schemes an ESG rating which must be disclosed | [½] |
| Financial incentives | [½] |
| For example subsidising investment management expenses | [½] |
| Or tax concessions on ESG investments | [½] |
| Or linking scheme levies to ESG factors | [½] |
| Direct provision | [½] |
| For example “green” loans to fund environmental projects | [½] |
| Or encouraging additional private provision | [½] |
| For example via subsidies or tax breaks for investment managers operating ESG funds | [½] |
| Legislation | [½] |
| For example require schemes to have a minimum holding in ESG type assets | [½] |
| Or a maximum holding in non-ESG type assets | [½] |
| Guidance / Education | [½] |
| For example guidance on how to consider the impact of the ESG matters on performance | [½] |
| | [Marks available 8½, maximum 4] |
| | [Total 15] |

Candidates generally scored well on all parts of this question.

Q5

| | |
|---|-----|
| (i) | |
| Group Life insurance is most commonly used to cover any lump sum death in service benefits | [½] |
| Death in service lump sums are usually considered for insurance... to mitigate mortality and liquidity risk | [½] |
| This is particularly relevant for a small scheme where risks cannot be pooled across the membership | [½] |
| This is particularly relevant for an executive scheme where the size of the benefit is likely to be significant | [½] |
| An insurance policy increases the stability and predictability of cashflows... as a smaller, regular premium is paid rather than a higher, unpredictable lump sum | [½] |
| Because the insurer can pool risks across more individuals than the scheme | [½] |
| Although this is likely to be more expensive over the long run | [½] |
| As the insurer premium covers both expected cost of meeting the benefits and insurer profit... | [½] |
| although the market is likely to be competitive, which would offset this. | [½] |
| For a small, executive scheme, it is likely that some degree of medical underwriting would be required to provide insurance cover | [½] |
| If a dependant's pension is also payable on death in service, the size of the lump sum insured can be approximately increased | [½] |
| However as the dependant's pension is paid periodically rather than as a lump sum, there is less risk of unpredictable cashflows | [½] |

Typically the additional lump sum is used to purchase an annuity for the surviving dependant
 On death after retirement an annuity may be purchased to provide dependant's pension [1/2]
 This will pass the investment, inflation and longevity risks to the insurer [1/2]
 Insurance exposes the scheme to the risk that an insurer is unable to meet any lump sum payment due. [1/2]

[Marks available 8½, maximum 4]

(ii)
 The insured liabilities could be excluded [1/2]
 For example if the income from the annuity exactly matches the outgo [1/2]
 Such as would be the case if policies are held in member's own names as part of a buy-out of the scheme [1/2]
 And therefore inclusion in the accounts would have a neutral impact on the balance sheet [1/2]
 The insured liabilities could be included [1/2]
 In both the asset and liability side of the balance sheet [1/2]
 The value placed on the annuity would typically use assumptions derived in a consistent way to the other liabilities valued [1/2]
 Although the value as an asset could differ from that of the liability to reflect differences in the covenant of the insurer and scheme sponsor [1/2]
 This approach can also be used if the policy does not match the benefit provision [1/2]
 For example the scheme pays an inflation linked benefit, but the annuity pays a fixed pension [1/2]

[Marks available 5, maximum 4]

[Total 8]

For both parts of this question candidates generally failed to make enough valid points to score well.

Q6

(i)
 If the employee wishes, or can only afford to contribute at a lower rate than 7%, then no employer contributions would be paid, so there is less incentive to join the scheme [1/2]
 If the employee wishes to contribute at a higher rate, and they are restricted from joining another pension arrangement, there is less incentive to join the scheme. [1/2]
 High earners may be restricted in the amount they can contribute to pension saving and so opt out. [1/2]
 Other approaches may offer more flexibility on timing and investment of contributions [1/2]
 or on the timing and form of benefits drawn. [1/2]
 For example, there may be a minimum age at which benefits can be drawn from a pension scheme, which would not apply to other savings vehicles. [1/2]
 The tax treatment of alternative savings approaches may be advantageous [1/2]
 An employee may want privacy concerning their pension arrangements - for example if they are contributing at a higher level in order to retire early. [1/2]
 There may be lack of trust in the scheme [1/2]
 Unaware of benefits (e.g. tax breaks) of saving into a pension scheme [1/2]
 Examples of alternative savings approaches that could be used include the following:
 Investing in property (e.g. ownership of property for rent); [1/2]
 releasing capital held in the individual's own property by downsizing to a smaller property

at retirement, or by use of an Equity Release policy; and [1/2]
 savings accounts or unit trusts (e.g. ISAs in the UK). [1/2]

[Marks available 6½, maximum 2]

(ii)

Eligibility

Make joining the pension scheme automatic (if permitted under legislation) [1/2]

Or provide the benefit on an opt-out basis [1/2]

Reduce or remove barriers to entry, e.g. reduce eligibility period [1/2]

but balance with the additional administration required for short service employees [1/2]

a vesting period could be considered as an alternative [1/2]

Provide access to a suitable savings vehicle / is the current savings vehicle appropriate? [1/2]

Contributions

Employer could increase matching to 1.5 or 2 times employee contributions [1/2]

Reduce the minimum level of contributions to join / consider making non-contributory for employees [1/2]

Offer company matching contributions to those who wish to contribute at a higher or lower rate than 7% [1/2]

Make it easy to stop / start / change contributions easily [1/2]

but balance with additional admin required [1/2]

Charges

Ensure low charges on investment funds, particularly any default fund [1/2]

Reduce charges paid by employee [1/2]

e.g. employee only pays investment charges and other charges such as administration or governance costs are met by employer [1/2]

Does the pension scheme represent value for money for members? [1/2]

Fund choices

Is there a range of available funds to suit most individuals' needs [1/2]

e.g. range of asset classes and types of investment (responsible investment funds, ethical funds etc) [1/2]

Is there a default / select a suitable default, low charges, life styling arrangement [1/2]

Administration

Is the process of joining easy and straightforward? [1/2]

Education and communication

Pay for financial advice for employees at the point of retirement [1/2]

Educate on importance of pension saving [1/2]

Provide regular statements of pension saving, including projections of future pension amount [1/2]

Provide comprehensive engagement program to encourage employees to engage with pension saving throughout their career [1/2]

Other

Allow transfers in from other arrangements so members can consolidate pension savings [1/2]

Does the scheme provide a range of options at retirement - e.g. access to cash, drawdown and annuities? [1/2]

Provide pension as part of a flexible benefits program - provide a core benefit and allow employees to increase contributions [½]
 Provide guarantees - e.g. on investment return, although risky and potentially expensive [½]
 [Marks available 13½, maximum 8]

(iii)

One way of encouraging non-State benefit provision is to provide a direct financial incentive. This may be of a fixed monetary nature or may be related to the level of provision [½]

A variation on the direct payment of an incentive is the use of beneficial tax terms as an encouragement. This could be through full or partial tax relief [½]

Tax incentives may be provided to the provider of the benefit, to the recipient of the benefit, or to both. [½]

Tax concessions for non-pension investments could be removed. [½]

Possible approaches could include:

Contributions (max one example)

contributions by the employer deducted from profits before deduction of any corporate tax; [½]

contributions by the employer not classed as taxable income for the employee [½]

contributions by the employee deducted from taxable income [½]

contributions subject to lower level of tax than profits or earned income [½]

Investments (max one example)

investment income (dividends, coupons, rents, etc.) not subject to tax [½]

investment growth (realised and unrealised gains) not subject to tax [½]

income or growth subject to lower levels of tax than from other investments [½]

Benefits (max one example)

regular income receipts not subject to tax [½]

lump sum benefit receipts not subject to tax [½]

'in kind' goods or services not classed as taxable as earned income [½]

benefits subject to lower level of tax than earned income [½]

The State may wish to encourage provision through certain providers or certain forms of management of funds [½]

and so the incentives may be only granted subject to the administration or investment being of an approved standard or form [½]

Encouragement may also be made by providing guarantees to top-up investment returns or premiums [½]

such guarantees may be given in real or nominal terms [½]

The provision of central administration resources, simple-to-follow regulations, quality certification or other open regulation may also encourage (or at least not discourage) provision [½]

The government could educate the population, so they are aware of the importance of contributing into an occupational pension scheme [½]

The government could require auto-enrolment in a pension scheme [½]

with minimum contribution levels [½]

Set caps on charges (e.g. for investment or administration) [½]

[Marks available 8, maximum 6]

[Total 16]

This question was generally well answered.

[Paper Total 100]

END OF EXAMINERS' REPORT