Institute and Faculty of Actuaries

EXAMINERS' REPORT

SA4 - Pensions and Other Benefits

Specialist Advanced

September 2022

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 later 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
December 2022

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

The aim of the Pensions and other Benefits Specialist Applications subject is to instil in successful candidates the ability to apply knowledge of the pensions and employee benefit environment and the principles of actuarial practice to providers of pensions and employee benefits both in the United Kingdom and the rest of the world.

This subject examines the ability of candidates to apply actuarial practice and concepts to potentially complex problems, integrating their analysis into a coherent whole, and evaluating and interpreting results to draw explicit conclusions.

From 2019 the requirement for detailed knowledge of the UK's legislative and regulatory frameworks has been moved to the UK Practice Modules (UKPM). The Specialist Advanced subjects will still require knowledge of the principles of the UK market and regulatory regimes but there has been a re-balancing to include comparison between different jurisdictions and expansion in non-UK-specific topics.

The Examiners therefore look for candidates to demonstrate their understanding of the syllabus but in particular they need to demonstrate ability in applying their knowledge and core actuarial skills to the specific situations that the Examiners have raised, having read the question carefully. Consistently, many of the unsuccessful candidates provide answers that are not sufficiently specific to the subject matter of the question, reproduce core reading that does not directly relate to the question context, or focus on one specific point without covering a sufficient range of points to answer the question. This does not enable the candidates to achieve the required marks. The Examiners encourage future candidates to remind themselves of what they learned in the Core Actuarial subjects, and to use past paper questions to practice applying these skills to the specific scenarios tested.

Well prepared candidates demonstrate that they have structured their solutions well, this is a big advantage in making points clearly and without repetition. There is a significant incidence of points being repeated in slightly different ways, restricting the scope for candidates to score marks. Good structure 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. 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.

In addition, candidates should carefully consider the instruction, for example, an instruction to list points should be answered with a list without attaching discussion. Similarly, a question asking for a discussion cannot be answered with a list of undeveloped points.

Finally, it is very helpful to the Examiners if candidates clearly identify points made; if they are set out clearly, well-spaced and easily legible. Whilst there is no loss of marks for not doing so, doing so does make it easier to identify scoring opportunities. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

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B. Comments on *candidate performance in this diet of the examination.*

The better prepared candidates were those who read the questions carefully, tailored their answers to the questions and thought about what was being asked, rather than just writing about what they know on a particular subject.

The paper also required candidates to think beyond the obvious answers in a number of places, and the better prepared candidates were able to bring in ideas from other areas of the course to score higher marks in these parts. Less prepared candidates didn't write enough points to ever be able to score highly.

Application aspects of the course are harder to score well on. This is an area that SA4 candidates consistently need to work harder on in preparation. By taking a methodical approach to answers, step by step, however, there are opportunities to score well. It is important that candidates make sure they provide a full answer to all questions.

The importance of structure in the exams should not be underestimated because this will lead to much more efficient work post exams. It is more difficult to get good marks in the absence of a good structure because it means that logical points are more likely to be missed. Sometimes points are just repeated further through the answer meaning that the response was more likely to look of sufficient length than it really was for the marks available. The computer based format should make it easier to structure answers well.

Time management is required to make sure there is enough time to answer all the questions.

Breaking the question down into smaller parts helps to make sure that a suitable breadth of answer is supplied. It is critical that candidates check that their answers specifically refer to the details of the question, using all of the information in the question pre-ambles. It is not the intention of the examiners to include information in the questions that is not relevant to the answers.

C. Pass Mark

The Pass Mark for this exam was 53
175 presented themselves and 46 passed.

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Solutions for SA4 - September 2022

Q1

(i)

(General points that can be credited once if they appear in either (a) or (b))

These are key assumptions [½]
and it is likely they will be set prudently to increase the likelihood that benefits will be met as the fall due [½]

The trustees should consider:
the long-term funding objective (such as funding for self-sufficiency or buyout) [½]
and any restrictions in legislation or scheme documentation on matters such as funding strategy [½]

(i)(a)

The structure of the discount rate needs to be considered - e.g. a pre / post retirement discount rate, yield curve, etc [½]
As the scheme is very mature a single discount rate may be appropriate [½]
There are several different methods of setting the discount rate [½]
such as bond yield plus risk premium, asset-based discount rate or mark to market [½]
A key consideration is whether, and to what extent, credit should be taken in advance for expected outperformance of growth assets in excess of the return on matching assets [½]
(The solution assumes bond yields plus risk premium, but comparable marks can also be awarded for a coherent solution using a different method)

The discount rates could reflect the market returns on risk-free investments of an appropriate term for the scheme's liabilities [1]
and could allow for outperformance appropriate to the scheme's investments [½]
both now and in the future as the scheme matures further [½]
which may result in a move to a better matched investment strategy holding limited growth assets and lead to a lower discount rate assumption [½]
with deductions for risk, investment expenses and fees [½]
that make allowance for the sponsor's covenant. [½]
There is a significant mismatch between the investment portfolio and the liability profile [½]
so the sponsor's covenant is very important unless the scheme is very well funded such as having a surplus on a buyout basis [½]
as the covenant is good the reduction to the discount rate for covenant risk need not be particularly high [½]
but there may be an argument for having more prudence in the discount rate in order to improve security [½]
and allow more flexibility over how deficits are recovered as the sponsor may struggle to meet sudden calls for cash contributions. [½]
However, when deciding how the covenant will impact on the risk deductions the fact that the sponsor has little access to cash means that the value of sponsor's assets needs to be assessed against the economic conditions that might lead to them being called upon [½]
as well as the ability of the sponsor to realise those values which may lead to a greater reduction to the discount rates for covenant risk [½]

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The trustees should also consider consistency between the discount rate and other assumptions such as inflation [½]

[Marks available 12, maximum 5]

(i)(b)

A suitable base mortality needs to be chosen [½]
projected to the valuation date [½]
with allowance for longevity improvements into the future [½]
Post retirement longevity assumptions will be very important for this mature scheme [½]
where close investment matching is more achievable [½]
but the maturity of the scheme may mean that longevity improvements might be relatively less important [½]
although they will still need to be set prudently [½]
However, as the scheme is open to new members, longevity improvements should still be considered [½]
The scheme is probably not large enough to use its own mortality experience [½]
but it should be straightforward to use a post code analysis of the membership to determine scaling factors of a standard mortality table [½]
Adjustments could also be made for occupation, size of pension and membership category [½]

[Marks available 5½, maximum 3]

(The inclusion of an LDI portfolio indicates that the trustees are trying to match the non-growth assets to the liabilities so the expectation is that these assets will move broadly in line with the liabilities and the sudden fall in growth assets is likely to result in a reduction in funding. However, alternative views could be taken and comparable marks for parts (ii) and (iii) should be awarded for a coherent argument based on that alternative view and any alternative approach argued in (i))

(ii)

The previous methodology for setting the discount rates is still appropriate [½]
i.e. adding portfolio outperformance to the risk-free return on matching assets and deducting something for risk which is appropriate given the sponsor's covenant [½]
If the equity market depression is considered to be a short-term feature, then the expected outperformance against risk-free returns may have increased [½]
because the intrinsic value of the businesses is largely unchanged which could lead to a greater addition to the risk-free return in order to produce a similar discount rate [½]
but the risk of achieving the higher outperformance may be increased so that the risk deduction may increase to produce a lower discount rate overall [½]
However, if the depressed market is considered to reflect a permanent shift, then the distribution of expected outperformance net of risk may be unchanged [½]
although the likelihood of more extreme outperformance may have reduced [½]
and both situations would also produce a lower discount rate [½]
The importance of the sponsor's covenant will have increased significantly [1]
with the lower value placed on growth investments and the higher liability value from lower discount rates [½]
Therefore the trustees should probably get the covenant assessment updated for the new investment environment [½]
as the covenant relies on the value of non-cash assets which could have changed significantly in the new market situation [½]
and which could have impacted on either the ability or the willingness of the sponsor

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to support the scheme [1]
Note that the covenant may have improved in respect of lower borrowing costs for the sponsor [½]
It is possible that the updated covenant assessment could conclude that the covenant has reduced because the need for cash is likely to be higher if the funding level has reduced [½]
which places more importance on the willingness and ability to realise the assets. [½]
Even if the sponsor's covenant remains broadly unchanged the trustees may want to reduce the allowance for it in setting the deduction for risk in order to increase the prudence [½]
so that the risk deduction is increased and the discount rates are relatively lower leading to a worsening of the funding level [½]

[Marks available 10, maximum 7]

(iii)
Discount rate approach:
The previous methodology for setting the discount rates is still appropriate [½]
but recent changes will affect the discount rate determined using this methodology [½]
partly because the application of that methodology is based on updated views on the various components [½]
Regardless of whether the current market conditions are considered to be temporary or permanent, a lower addition to the risk-free return is likely to be appropriate on the grounds of prudence [½]
because either there is a greater risk in achieving the anticipated higher outperformance on the growth assets [½]
or there is a higher reliance on the covenant to offset the risk in the growth assets. [½]
The lower discount rate means that there is more likely to be a deficit [½]
or the deficit is likely to be larger [½]
so the scheme is more reliant on the sponsor's covenant to support deficit contributions [1]

Further information:
The reasons for the change in investment market conditions [½]
such as whether these are specific to the country or sectors of the investment market and whether they are likely to be temporary or permanent [½]
and what the impact has been on the assets of the scheme [½]
The impact of these changes on the sponsor covenant [½]
which may depend on its industry and business plans [½]
The availability of cash from the sponsor to meet potential deficit contributions [½]
and to support the mismatch risk in the investment strategy [½]
to the determine the extent of a potentially weakening covenant in the context of the scheme [½]
An asset liability modelling exercise might be used to help understand the optimal solutions [½]

Further actions:
The simplest solution to retain the original outcome from the discount rate approach [½]
and restore the trustees' confidence in the sponsor's covenant [½]
would be to use other instruments to bolster the scheme's finances [½]
such as the sponsor identifying readily realisable assets from the strong balance sheet [½]

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to the value of the difference between the liability values on the old and revised lower discount rate assumptions [½]
and give the trustees a charge over these assets in the event that the growth assets do not perform sufficiently to support the weaker original valuation assumptions. [½]
Other options might be parent company guarantees or investment in credit default swaps [½]

[Marks available 13, maximum 5]

(iv)
The trustees need to agree contributions with the sponsor that will return the scheme to:
full funding based on the valuation assumptions [½]
and this should reflect the sponsor's covenant [½]
and the affordability of the contributions [½]
It should also consider any restrictions in legislation or scheme documentation such as a funding strategy [½]
Although valuation assumptions are normally set prudently the deficit repair contributions could be set to reflect a more realistic view of the returns available [½]
The other variables are the method used and the period over which the deficit will be repaired [½]
The trustees will normally want the period to be as short as possible to get the money into the scheme and improve the security of the members' benefits [½]
but not so short as to make the contributions unaffordable for the sponsor [½]
in the context of running their business. [½]
Similarly, the trustees may prefer a front-end loaded method of meeting the deficit. [½]
The sponsor has little cash so that might tend to make the period longer unless they are able to generate good profits [½]
In this case the growth assets have done most of the work needed to repair the deficit since the valuation [½]
but this position might reverse again so cannot be relied upon [½]
and that outcome was by no means guaranteed [½]
so consider what the trustees and sponsor would have done about taking account of experience since the valuation had it gone against the scheme [½]
Also, consider taking account of what has been done in similar situations in the past and whether the current approach will set a precedent for the future [½]
Also, taking account of experience after the valuation date makes it harder to negotiate the deficit contributions because the target keeps moving [½]

(The following sets out a possible approach but comparable marks should also be awarded for other well-reasoned alternatives)
The actuary may therefore suggest not taking direct account of post valuation experience [½]
i.e. by repairing the deficit based on the 85% funding level at the valuation date [½]
but base the deficit contributions on asset return assumptions that remove some of the prudence in the valuation discount rate to recognise the equity market growth [½]
and apply these over a period which produces affordable contributions [½]
The negotiation is then about how much of the prudence to remove and what period
To use so that there is a balance between member security and affordability [½]
in the context of the sponsor's covenant [½]
The contributions produced through this process would be payable regardless but they only repair the deficit at the valuation date if the higher returns are achieved [½]

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If those higher returns are not achieved, then the deficit contributions would need to be higher [½]
and the difference between the contribution required on the valuation assumptions and those agreed [½]
might be treated as contingent contributions to be paid if the higher returns are not achieved [½]
for example by the continued recovery of the equity markets [½]
[Marks available 14, maximum 10]

(v)
The trustees could call for a further valuation [½]
if they want to set the contributions based on what they and the sponsor consider to be more normal investment conditions [½]
Having suffered a bad investment experience the trustees may now be less tolerant of running the mismatching risk that they currently have in the scheme [½]
so they might want to take advantage of the recovery in investment conditions to carry out some de-risking [½]
and/or put in place some de-risking triggers [½]
to crystallise good investment performance as the scheme matures further. [½]
Both of these might reduce the reliance on the sponsor's covenant. [½]
Other options might be to consider alternative financing options such as parent company guarantees [½]
or buying in/out the pensioner liabilities if the market conditions are favourable. [½]
The trustees might also consider running some incentive exercises [½]
e.g. enhanced transfer values, total pension increase exchange or full commutation [½]
to remove liabilities from the scheme [½]
or pension increase exchange [½]
to remove inflation and longevity risks [½]
Could also consider reviewing any discretionary practices [½]
or reviewing option terms and consent requirements [½]
[Marks available 8, maximum 5]
[Total 35]

Many candidates found this question challenging overall. Some candidates got confused between answering the later parts to this question and often did not answer the specific question being asked. For example, talking about liability reduction exercises (ETV etc) and closure to accrual in the context of repairing the funding valuation deficit, instead of suggesting practical ways to set contributions that recognised the asset recovery whilst acknowledging that it might reverse again.

Part (i) was generally answered well, with many candidates picking up the relevant information from the question to comment on discount rate and mortality. A small number of candidates didn't mention employer covenant and/or prudence or tie this back to the scheme and employer characteristics mentioned in the question. In part b) a few candidates didn't mention explicitly the need to set the base table and future improvements assumptions.

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Parts (ii) and (iii) were a challenge for many candidates. Some candidates did not focus on the relevance of long term and short term changes in market condition and did not pick up the fact that the scheme had a high level of hedging. The better prepared candidates thought about the impact on covenant and impact of LDI investments on the assumption setting.

In part (iv) some candidates did not focus on the basic principles of setting a recovery plan and the need to consider cash affordability. Some of the options suggested might have been suitable for helping to keep contributions down if the agreed deficit contributions were putting cashflow strains on the sponsor. But they were offered without having considered contributions as the most obvious solution to reducing the deficit or without exploring how contributions might be agreed in the context of very volatile funding levels given the investment mismatch.

For part (v) the better prepared candidates answered this well. However, some struggled with sufficient examples to gain full marks.

Q2

(i)

Defined benefit (DB) scheme [½]
where members' benefits are defined in terms of service and/or salary at the benefit date [½]
the members pay fixed contributions [½]
and the employer pays the balance of the cost [½]
In these schemes it is the employer that primarily bears the risks [½]
Defined contribution (DC) scheme [½]
where members' benefits are defined by the value of their individual pot of money [½]
which has been built up from contributions from the member and sponsor [½]
together with investment returns [½]
In these schemes it is the members who primarily bear the risks [½]
but they also tend to gain more flexibility over the benefits they receive at retirement. [½]
Hybrid or risk-sharing scheme [½]
which could include schemes with defined benefit or defined contribution underpins [½]
and collective defined contribution (CDC) schemes where the benefits are adjusted in the light of investment and/or longevity experience [½]
These schemes seek to provide greater certainty to members about the benefits they will receive than a DC scheme [½]
and greater control of employer costs than a DB scheme [½]
The mechanism for achieving these goals is risk sharing [½]
across members, employers and companies providing insurance and investment services [½]

[Marks available 9, maximum 6]

(ii)

Employer:

The employer will want to consider the benefits to be offered in terms of its

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remuneration policy	[½]
while ensuring compliance with all legislative requirements and best practice guidance	[½]
They will consider whether they want to target particular groups of employees	[½]
while meeting workforce needs	[½]
through both the benefit structure and eligibility requirements.	[½]
They will want to ensure scheme costs fall within its budget in terms of ongoing benefits costs	[½]
and in terms of setting up the arrangement	[½]
The employer will consider the impact on its corporate accounts	[½]
and their risk tolerance in terms of the variability of costs	[½]
They will need to decide whether they want the scheme to be set up under trust or under contract	[½]
and who they want to be appointed as trustees / scheme managers	[½]
The employer will want to set the benefits at a level which meets any stipulations in the government contract	[½]
and are sufficiently competitive in ABC's industry to help attract new employees	[½]
For DB this will mean defining pensionable salary, accrual rate and retirement age	[½]
together with benefits for dependants in different situations	[½]
For DC this will mean setting contribution rates for members and the employer	[½]
and determining dependant benefits	[½]
In the hybrid scheme the employer may have to define the components of both DB and DC	[½]
but the levels are likely to be lower for an underpin	[½]
and for CDC they may have a say in the policies for augmenting or reducing benefits in the light of experience	[½]

State/Regulator:

The State/Regulator role may have been carried out some time previously by establishing the legislative and regulatory environment in which the schemes must operate	[½]

They might have done this by setting restrictions or requirements in respect of:

the benefits provided by schemes	[½]
the ways that scheme money is invested	[½]
any incentives for pension provision - e.g. tax relief	[½]

In this case the State may also set separate restrictions under the government contract in relation to: [½]

the scheme type to be used	[½]
the level of benefits provided	[½]
They may also have imposed a requirement that such a new scheme be set up under trust	[½]

Trustees or scheme managers:

All schemes could be set up under trust and the trustees are responsible for running the scheme in accordance with the trust	[½]
acting in the best interests of all the members	[½]
holding and investing contributions to secure the benefits	[½]

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DC schemes may also be set up under contract [½]
in which case the scheme managers are responsible for adhering to the contract [½]

Legal advisors:
They will advise the employer in relation to the requirements for establishing each type of scheme such as the documentation required [½]
They will also advise on the impact of legislation and regulation [½]

Actuaries:
They are likely to be involved in advising the employer regarding the costs of the level of benefits being considered for each type of scheme [½]
They may also advise on scheme design for the chosen scheme type so that the funding is as efficient as possible [½]

Investment advisors:
They will advise on
investment strategies for DB schemes [½]
ranges of funds for DC schemes [½]
fund selection strategies for DC scheme members [½]
investment managers for DB or DC schemes [½]
contract providers for DC contract-based schemes [½]
(Marks could also be given for any member roles or interests set out in relation to setting up the scheme)

[Marks available 21, maximum 12]

(iii)
General:
The arrangement will need to take account of any stipulations made by the State in terms of the government contracts [½]
and any constraints in pension legislation and regulation [½]

The employer should consider:
taxation and how this may affect choice of benefit scheme [½]
whether the arrangement should be trust based, which may be required if benefits are defined benefit [½]
the employers risk tolerance, for example it may prefer a DC arrangement where the risks are borne primarily by the members [½]
which arrangement will best attract and retain the workforce desired by the employer; [½]
the desire to target different groups and how this can be achieved within different arrangements [½]
adviser fees and the costs involved in administration and communication of the arrangement [½]
what arrangements are offered by competitors [½]
the security of member benefits under the different arrangements [½]

DB schemes:
The first step will be to set the retirement age in line with industry work practices [½]
i.e. is there an age below State retirement age when workers in this industry are no longer able to perform their work [½]
and this will be common across all scheme types [½]

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Initial design should probably focus on a member who joins the scheme early in their working life and continues to work until retirement age [½]
Setting the desired level of benefit for this member compared to their salary before retirement [½]
will need to take account of the likelihood of lower outgoings due to reductions in such things as mortgage and commuting costs [½]
This will indicate an appropriate accrual rate [½]
Might also consider the definition of final pensionable salary to get a suitable income replacement ratio [½]
such as what elements of pay might be included [½]
and what averaging period might be appropriate [½]
Benefits for dependants need to consider the form and level of benefits appropriate for when the member dies [½]
For a DB scheme there may be provision of a pension to the dependant which is a proportion of that paid to a retired member [½]
or, for other members, the pension that would have been payable to the member had they retired at the time of death [½]
The proportion may be set at 50% in the expectation that it now only needs to support one person instead of two [½]
but that may be increased if there are still dependent children [½]
However, that may be based on an assumption that household income was only provided by the member, which may not be true [½]
and that living costs are half the living costs of a couple, which also may not be true [½]
It is also necessary to consider whether all dependants qualify for the benefits [½]
and whether to pay the same benefit regardless of the age of the dependant. [½]
Although not strictly a benefit to a dependant, it is also common to provide a lump sum payment on death [½]
which may go to the member's estate to settle debts like mortgages or funeral costs [½]
or go straight to a dependant [½]
The total contribution rate required will probably be assessed using assumptions [½]
based on an investment strategy which the investment advisers recommend as appropriate to the duration of the initial scheme membership [½]
as this allows for the age and salary profile of those members [½]
Although prudent assumptions will probably be used in funding the scheme [½]
the expected cost should probably be assessed using realistic assumptions [½]
as otherwise the scheme benefits may be set too low because higher benefits may look unaffordable [½]
However, the employer will need to be aware of the impact prudent assumptions will have on their cashflow [½]
The split of contributions will be determined by setting a rate for members (probably about 25% to 30% of the total) [½]
and the employer rate will be the balance [½]
If that proves not be affordable for the employer, the accrual rate may be adjusted down and the calculations re-done [½]

DC scheme:
The process of setting the retirement age and the target benefits at retirement will Take place in a similar manner as for a DB scheme [½]
However, the target benefits will now be used to assess a total contribution rate [½]
based on the expected cost of providing benefits at retirement [½]

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depending on the options to be offered at retirement [½]
such as cash, annuity purchase, income drawdown [½]
and the assumed returns from a default investment fund [½]
as advised by the investment adviser [½]
The assumptions used for this calculation will also be realistic rather than prudent [½]
otherwise the contributions may be too high [½]
and produce an excessive benefit [½]
A dependant's pension on death after retirement is likely to be provided in a similar manner as for the DB scheme [½]
but on death before retirement it may be that there is a return of the DC pot [½]
and, perhaps, a higher lump sum than in a DB scheme in order to purchase benefits for dependants [½]
especially as the pot may be insufficient for young members, or those with short service, to provide adequate benefits for dependants. [½]
Therefore the actual total contribution must make allowance for the cost of the member and dependant's pension at retirement [½]
and that higher total must be split between member and employer in a similar manner to DB [½]
The contribution structure should be set to meet the employer's objectives [½]
such as an age-related structure to reflect the cost of benefits increasing with age. [½]
The investment advisor will need to suggest a range of funds to be made available for members to choose from [½]
in order to cater for different attitudes to risk [½]
different stages of working life [½]
and different ways in which the members could take their benefits [½]
e.g. cash, pension, income drawdown etc [½]

Hybrid scheme:
Each type of hybrid scheme will probably have elements of both DB and DC [½]
so the design process will need to incorporate features from the above as appropriate to the actual mix desired between DB and DC [½]
If the DB or DC benefit is being applied as an underpin then these are likely to be set at a lower level [½]
to try to ensure that a DC member does not suffer poor investment returns unduly [½]
or that a DB member doesn't receive less than they might have expected from a (small) multiple of their own contributions [½]
With these schemes it will be particularly important for the employer to consider risk [½]
which risks it is prepared to bear and which risks should be passed to the members and other parties [½]
and therefore which design to use - e.g. risk sharing DB arrangement with an underpin, or risk sharing DC arrangement with an underpin [½]

[Marks available 36½, maximum 22]

[Total 40]

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Overall, candidates answered this question well, although many found difficult to come up with enough breadth of ideas to gain full marks. Clearly structuring the answer was key here, and those who used headings/tables were able to cover more points.

Some candidates commented about the roles in running an existing scheme instead of setting up a new scheme for part (ii) and explaining how an existing scheme works rather than thinking about the considerations for setting up a new scheme for part (iii).

Part (i) was generally well answered by most candidates.

In part (ii) many candidates failed to realise that the sponsor's role in setting up a new scheme is by far the largest of the stakeholders and therefore focused too much attention on other stakeholders (e.g. the member) who play a minor role in comparison and missed easy marks

In part (iii) many candidates did well on the 'general' points and picked up a lot of these marks. Only a few candidates commented on how to determine the level of benefits to offer in a new scheme by striking a balance between income replacement ratios and the cost of benefits on a realistic basis, and for the other details talked about these being defined in the rules of the scheme without realising that they were being asked about the considerations to set those details in order to write them into the rules.

Some candidates did not answer the specific question and just described how DB, DC and hybrid schemes worked rather than setting out the considerations that would need to be made in the report or considered when setting up a new scheme.

Many candidates also mistakenly explained how DB schemes are much more expensive than DC schemes rather than realising that the same benefits cost broadly the same amount in either vehicle and it's the regulatory and governance costs and DB guarantees that make the difference for the same level of benefits as well as the pace of funding for DB.

Q3

(i)

Advantages:

The trustees' proposal may better meet members' needs, circumstances and characteristics [1]

For example, members who are single can use the pot to secure a higher pension for themselves without making provision for a dependant [½]

Members who don't expect to live as long as their peers can use income drawdown [½]

to take a higher pension than the scheme might otherwise provide [½]

or they could purchase a higher dependant's pension [½]

Members who have a lower expectation of inflation can secure a higher pension with lower increases [½]

Members who have other (larger) pensions with good indexation may feel they have

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less need of increases on this pension [½]
so they also could secure a higher pension with lower increases [½]
Members who wish to remain invested in higher growth assets could do so if they chose income drawdown [½]
The proposal may enable the member to take advantage of favourable tax treatments [½]

Disadvantages:
The trustees' proposal may lead to members making poor decisions resulting in lower benefits overall [1]
especially if individual independent advice is not provided. [½]
For example, members may make poor judgements about the inflation they will experience [½]
or how long they will live [½]
and end up being worse off [½]
Members who opt for income drawdown could make poor investment decisions [½]
or take out too much income [½]
or take it at the wrong times [½]
or they just live a long time [½]
and end up running out of money [½]
or having drastically to reduce their income in order to make the fund last [½]
The tax treatment of such an option may be less favourable than the normal scheme benefits [½]

[Marks available 12, maximum 6]

(ii)
The trustees might insist that members exercising these flexibilities get financial advice [½]
perhaps only applying that if the pot will be over a certain size [½]
or perhaps restrict the amount or proportion of benefits that can be converted to income drawdown [½]
In any case the trustees will want to ensure that any communications are clear, unbiased and fair. [½]
The trustees might limit the range of investment funds available for members opting for income drawdown [½]
in order that they not be exposed to the most risky investments [½]
or they might put in place an underpin or guarantee [½]
subject to agreement with the employer since this will likely incur extra costs [½]
The trustees might ask the administrators to run annual health checks on income drawdown funds [½]
in order to assess how long each remaining fund might last if income continues at its most recent level [½]
and alert the member if that is below their life expectancy [½]
or insist that they convert the fund to a pension [½]
The trustees might also insist on converting the fund to a fixed pension when the member reaches a certain age [½]
or when the fund reduces to a certain level [½]
The trustees might also consider warning members not to increase their income drawdown amount when the investment values are going down [½]
The trustees might provide tools or information to educate members before they make these choices [½]

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[Marks available 8, maximum 4]

(iii)
General:
The terms should comply with legislation [½]
for example does gender discrimination legislation required the use of unisex factors. [½]
The actuary should consider any guidance [½]
for example consistency with best practice on incentive exercises [½]
The trustees should consult with the employer
Should the dependant's consent be required where a dependant's pension is being lost as a result of the member opting for a single life pension? [½]
The trustees should consider who will meet the expense of exercising the option [½]
and if it is to be met by members will it need to be reflected in the option terms? [½]
If the scheme provides discretionary benefits should these be factored into the calculations? [½]

Details:
The conversion terms should be based on best estimate assumptions at retirement [½]
e.g. the discount rate may reflect bond yields based on the expected post retirement term [½]
and the post retirement mortality assumption may allow for expected longevity improvements over that term [½]
in order to be fair between members who choose to take their benefits in a different form and those who do not [½]
and between those who make different choices as to the form of their benefits [½]
and for those who choose to retain a cash sum for income drawdown [½]
The trustees should consider the impact on the funding and discontinuance positions [½]
as there is likely to be a gain on these prudent bases if the lump sum is calculated on a realistic basis [½]
any benefits are taken as a lump sum or income drawdown [½]
However, this gain is likely to be reduced if the lump sum is then converted to a pension in a different form on a consistent best estimate basis [½]
The alternative route for members to exercise flexibility would be to take a transfer value to a DC arrangement at retirement [½]
and purchase an annuity on the open market [½]
This means that the terms will need to vary as market conditions change [½]
rather than being fixed terms [½]
although they may be updated only monthly (say) [½]
to make the administration easier [½]
or the quoted figures may be held for a period [½]
to give members certainty during the time they are taking to make their decisions. [½]
In converting the original scheme pension to a pension pot selection risk is likely to be ignored [½]
assumptions will be needed for proportions of members with a dependant [½]
and the age difference to the member [½]
rather than basing the calculations on an actual dependant [½]
and assuming normal health for members in poor health [½]
otherwise the scheme will get the experience gain for single members and those in poor health compared to the funding basis. [½]

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The trustees might decide to use the transfer value basis for this purpose in order to be consistent with the alternative route [½]
although that may not be appropriate if the transfer value basis reflects the scheme's investment strategy for all members rather than those at retirement [½]
or it allows for discretionary benefits [½]
and the trustees do not wish to include them in the conversion terms. [½]
When calculating the amount of pension with a revised dependant fraction, however, actual dependants and their age difference should be used [½]
to reflect the scheme's liability [½]
and these terms should be compared to market rates for annuity purchase as this is the alternative route [½]
The trustees need to consider whether they want to make any allowance for the health of the member [½]
in order to avoid selection against the scheme [½]
Terms will be required for converting residual income drawdown pots into fixed pensions [½]
but the longevity assumptions for these will be harder to assess because the members may be much older where the statistics are less reliable [½]
and they may be carrying out this conversion because they fear they are going to outlive their pension pot [½]

[Marks available 22, maximum 11]

(iv)
The trustees might prevent members from choosing to take a pension where the dependant's pension is higher than the member's pension [1]
although this would not be appropriate if the scheme only provides a member pension and the option is there to purchase a dependant's benefit [½]
or they might insist that such members are medically underwritten at their own expense [½]
to ensure they are not in poor health and selecting against the scheme. [½]
They might also seek a medical report for members who are removing all pension increases [½]
to ensure that they are not in poor health [½]
although the scheme might meet the expenses of this as the member may simply not see the need for increases [½]
perhaps because they have a different expectation of inflation [½]
or they may have other income sources that will provide that increase. [½]
The trustees might also seek a medical report for members converting their income drawdown pots to a pension [½]
if the pot is above a certain size [½]
in case the member is in very good health [½]
but the scheme may again meet these costs [½]
The terms may be set so that they are not cost neutral in order to make an allowance for selection risk [½]
The trustees may require that their consent is sought for large conversions [½]
or they may limit the benefit that can be converted so that all members retain a minimum pension in its current form in the scheme [½]
or limit the guarantee period for quotations so that markets have less time to move against the scheme [½]

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The trustees might also try to avoid reputational damage by insisting that members get independent advice [½]
or attend educational workshops to learn about the factors affecting their choices [½]
[Marks available 10, maximum 4]
[Total 25]

Some candidates did not realise that question 3 was asking about offering the flexible benefit options inside the scheme rather than taking the cash sum to secure those benefits outside the scheme.

Part (i) was generally well answered with many candidates scoring highly.

In part (ii) a lot of candidates managed to come up with some marks here, but only the better prepared candidates came up with the range needed to get more of the marks on offer.

In part (iii) some candidates could have scored better if they had covered all the relevant points required for factor setting, including focussing on key assumptions and the importance of consistency with other assumptions.

Some candidates did not consider the terms to produce the same lump sum regardless of whether it would be used to repurchase pension benefits within the scheme or whether it would be used to establish an income drawdown pot for the member's exclusive use and even fewer considered the terms for determining the reshaped pension benefits in the scheme.

Part (iv) was generally well answered. Most candidates focussed on the income drawdown option and were able to get some marks, but some missed the fact that the benefit form could be changed to a manner of their choosing.

[Paper Total 100]

END OF EXAMINERS' REPORT

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