Institute and Faculty of Actuaries

EXAMINERS' REPORT

SP4 - Pensions and Other Benefits Specialist Principles

September 2023

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.

For some candidates, this may be their first attempt at answering an examination using open books and online. The Examiners expect all candidates to have a good level of knowledge and understanding of the topics and therefore candidates should not be overly dependent on open book materials. In our experience, candidates that spend too long researching answers in their materials will not be successful either because of time management issues or because they do not properly answer the questions.

Many candidates rely on past exam papers and examiner reports. Great caution must be exercised in doing so because each exam question is unique. As with all professional examinations, it is insufficient to repeat points of principle, formula or other text book works. The examinations are designed to test "higher order" thinking including candidates' ability to apply their knowledge to the facts presented in detail, synthesise and analyse their findings, and present conclusions or advice. Successful candidates concentrate on answering the questions asked rather than repeating their knowledge without application.

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
November 2023

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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 Principles subject is to instil in successful candidates the ability to apply 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.

Well prepared 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 diet of the examination.*

This was a well-balanced exam paper and well prepared candidates were able to score well and pass. The pass mark of 63, reflects the performance of a minimally competent candidate. The pass mark is higher than 60 to reflect that parts of the paper (for example Question 2(i)) were more straightforward than usual. To demonstrate competence, a Candidate needed to score at a higher level than a pass mark of 60 and a pass mark of 63 was agreed as the standard required of the minimally competent candidate.

It is very important that candidates consider all aspects of the question and read the preamble fully. By using all the information available, candidates can ensure they give a full answer. Giving just a little more detail to clearly show understanding as well as clearly presenting distinct points can turn a close fail into a pass.

Where appropriate, it is also important to apply knowledge to the specific scenario presented in the question. Application of knowledge is a distinguishing feature between candidates that pass and candidates that fail.

The questions that were least well answered in this paper were questions Question 4(ii) relating to an analysis of transfer experience and Question 6 relating to valuations.

Candidates are reminded to study the whole syllabus as all areas may be tested.

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Candidates are reminded to pay attention to the command verbs. 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 63
158 presented themselves and 80 passed.

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Solutions for Subject SP4 - September 2023

Q1

(i)

Joint life annuity	[½]
Nil increasing annuity	[½]
Annuity increasing with a fixed rate each year	[½]
Or by capping the inflationary increase	[½]
Provide a cash lump sum	[½]
either total fund or partial	[½]
Buy a pension in the scheme	[½]
Drawdown facility	[½]
and potentially purchasing an annuity at a later date	[½]
Transfer to an alternative arrangement	[½]

[Marks available 5, maximum 3]

(ii)

Colleague may have changed their contribution rate over the year	[½]
i.e. increased their contribution rate	[½]
Colleague may have made additional contributions as lump sums into the pension scheme over the year	[½]
e.g. may have invested their bonus into the pension scheme	[½]
or could have transferred in funds from another pension scheme	[½]
Colleague could have had a higher salary increase over the year	[½]
or have different salaries entirely on which contributions are based on	[½]
Colleague may be invested in different investment funds	[½]
or colleague may have changed their investment funds over the year	[½]
in particular the colleague invested in assets which lead to higher returns	[½]
or funds with lower expenses or tax charges	[½]
They may be both in the default fund but in different funds due to the impact of lifestyling	[½]
They may be invested in assets of different currencies	[½]
and the member's fund value could be depressed due to currency falls	[½]
Such asset classes may have different annual management charges	[½]
The employer contribution rate for the colleague is different	[½]
e.g. due to a different role / category of membership / age profile	
Other relevant example	[½]
There may be an error in the calculated fund value in one or both of the statements	[½]

[Marks available 9, maximum 5]

[Total 8]

This question was generally well answered.

Q2

(i)

Act prudently and conscientiously and in good faith	[½]

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and without or appropriately managing any conflict of interest	[½]
Need to operate in the best interest of all members in the scheme	[½]
being equitable between the different categories of members e.g. actives, deferreds and pensioners	[½]
They are not to profit for their duties	[½]
they will be paid a fee, possibly from the scheme assets, for being a scheme manager and this should be commensurate with the services they provide	[½]
Benefit administration	[½]
although day to day duties are likely to be outsourced	[½]
Exercise decision making powers	[½]
e.g., in relation to payment of discretionary benefits (or other relevant example)	[½]
Use advisors to help them manage the scheme	[½]
including actuarial and legal advisors	[½]
Adherence to legislation	[½]
and the scheme rules	[½]
Invest the assets appropriately	[½]
consulting with an investment advisor as necessary	[½]
Liaise with the sponsoring employer	[½]
for example in relation to the funding / investments / covenant (or other suitable example)	[½]
Have regular meetings	[½]
with the company and the advisors	[½]
Keeping notes (minutes) of meetings	[½]
to document all decisions made by the scheme manager	[½]
Maintain confidentiality	[½]
not to discuss any scheme specifics to other companies whom they are the scheme manager for	[½]
Monitor company covenant	[½]
either themselves or employing a specialist firm	[½]
e.g., which produces an independent business review (*or other suitable example*)	[½]
Finance the benefits	[½]
ensuring any required contributions to the scheme are made	[½]
and ensure the security of the benefits	[½]
Monitor the funding position of the scheme	[½]
e.g. agree funding principles and monitor the position of the scheme review (or other suitable example)	[½]
Communicate with members and regulatory bodies	[½]
Undertake training and keep their pension knowledge updated	[½]

[Marks available 17, maximum 7]

(ii)

Financial:

The independent Trustee will charge fees	[½]
may be paid out of the scheme assets or directly by the employer	[½]
need to ensure payment from scheme assets does not negatively impact the funding position	[½]
But may be some cost saving due to less reliance on advisers	[½]
Cost and time of transitioning to new arrangement	[½]
e.g. seeking legal advice concerning any governance requirements	[½]

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Expertise:
Independent Trustee will have greater expertise as this is their profession [½]
They could have a professional qualification for this role [½]
including in depth knowledge of relevant legislation [½]
and bring expertise/experience from the role as Trustee on other pension schemes [½]
Whereas current Trustees are likely to be lay people with no specific knowledge of pension schemes prior to taking on the role [½]
The independent Trustee will take time to get up to speed on scheme specifics [½]
and may not be aware of any historic benefits / treatments / discretions if not properly documented by the current scheme managers [½]

Time available:
Independent Trustee could have greater time to focus of the scheme [½]
Compared to current Trustees who do this role in addition to their main job [½]
But time may be constrained if they are appointed to too many other schemes [½]

Independence:
Independent of being a scheme member… [½]
and employee [½]
so reduced possible conflicts of interest that the current Trustees could be impacted by [½]
However as they are appointed by the sponsoring employer this could give rise to a conflict [½]
as they could be removed from role [½]

Implications of single Trustee:
Areas which require Trustee discretion would be made by themselves as the only scheme manager [½]
so more efficient - not put through a vote / discussed with other scheme managers as currently would be the case [½]
although may reflect the Independent Trustee's own personal views / bias [½]
They may have contacts in actuarial and legal advisors as they work with them on other pension schemes [½]
which could ensure that the scheme has access to the best advisors for the scheme [½]
Loss of direct links to membership and company may make governance more difficult [½]

[Marks available 13½, maximum 6]

[Total 13]

This question was generally well answered and candidates demonstrated good knowledge of the role of a Trustee and the possible implications of moving to a single independent Trustee.

A significant proportion of candidates achieved full marks for part(i).

Q3

(i)

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Retirement age of 60 is lower than the state pension age or cultural norms for retirement [½]
Late retirement factors are known to be generous [½]
May not be able to afford to retire at age 60 (and it isn't an option to retire and continue to work) [½]
Are fit and able and wish to continue working beyond age 60 [½]
May be able to use other assets or benefits to fund retirement initially [½]
Unaware of the scheme benefit or retirement age and do not request their benefits at age 60 [½]
They are members of the replacement scheme / another scheme which has NRA greater than 60 [½]

[Marks available 3½, maximum 2]

(ii)
Any requirements in the scheme rules or legislation [½]
Is scheme manager or employer consent required for the member to take the option? [½]
Are there any restrictions on how the factors should be determined or who has the power to set them [½]
such as requiring the factors to be unisex *(or other relevant example)* [½]
The objective of the exercise [½]
Does the employer wish to encourage or discourage late retirement? [½]
which will affect the generosity of terms [½]
The relative value of the option compared to the expected cost of providing the 'regular' benefit [½]
Taking into account any tax differences [½]
And any allowance for discretionary pension increases [½]
And fairness to those who exercise, and those who don't exercise the option [½]
Basis used to set factors [½]
Whether the basis is fixed or market related [½]
Fixed basis is easier to administer [½]
Consideration of the scheme's investment strategy and how it may influence the assumptions [½]
Level of prudence to include [½]
and the impact of prudence on the factors and resultant member benefit [½]
Benefit security - of those exercising and not exercising the option [½]
A funding gain/loss could arise depending on how the late retirement terms compare to the funding basis [½]
Consider the impact on funding level and/or contribution requirements [½]
and the bearing of the sponsor covenant on this [½]
and the views of the employer [½]
Is there a risk of selection against the scheme? [½]
Impact on members of any proposed changes [½]
and consideration of transitional arrangements [½]
Consistency of approach compared to setting of other actuarial factors in the scheme [½]
or with other similar schemes / companies [½]

Practicalities:
Frequency of review - have they been reviewed recently, how often are they reviewed? [½]
Impact on administration [½]

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e.g. how easy to apply different factors for different tranches of benefits, or different factors for the different categories of members [½]
or additional administration costs [½]
Ease of communication of any new factors to members [½]

Take up rate:
More consideration of the above factors may be needed as it is a popular option [½]
Is the current high take up due to the current terms or influenced by other external factors (e.g. cultural norms) [½]

[Marks available 17, maximum 7]

(iii)
Scheme:
Relatively more stable cashflows [½]
Timing of retirement benefits known in advance [½]
May make matching investment strategies easier to deliver [½]
Although liquidity / marketability needs to be considered [½]
especially if many members now begin to take transfer values to alternative arrangements in order to access retirement flexibility [½]

Funding implications:
If the funding valuation includes an allowance for members to retire late [½]
A funding gain/loss could arise depending on how the late retirement terms compare to the funding basis [½]
A funding gain could arise if lots of members take transfer values on best estimate bases to see retirement flexibility in alternative arrangements [½]

Easier to administer:
Administrator can set up benefits in advance when members' retirement ages are approached [½]
and not needing to deal with late retirement requests at different dates or providing quotations [½]
Resulting in lower cost of administration [½]
Though may still require contacting member in advance to obtain bank details to put the pension into payment [½]

May require legal and actuarial advice:
Members may be allowed to take their benefits after their normal retirement age under legislation [½]
Scheme rules may need amending to remove this right [½]
especially if members do not currently require consent from the scheme manager/company to retire late [½]

Company:
Benefits could be cheaper or more expensive depending on the generosity of LRFs [½]
e.g., if late retirement uplifts are generous, then removing these would reduce benefits [½]
Which would have implications for employer costs [½]
Which will impact contribution requirements [½]
Although these can be more stable to reflect the greater stability in cashflows and

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easier matching [½]
Manpower planning may be more straightforward [½]
Although may see employees retire at 60 who the employer would like to retain
e.g. experienced office workers [½]
But also see employees retire who are losing productivity [½]
e.g., manual workers who are able to do less [½]

Both:
Need to communicate changes to members [½]
Members may not be happy [½]
especially if they actively want to take their benefits after normal retirement age [½]
leading to complaints / reputational impact [½]
Although if members are taking their benefits late because they forget / unaware of
their benefits, then this will ensure they take their benefits that they are eligible. [½]
Will need to consider transitional arrangements for those who are currently over
age 60. [½]
Potential liquidity issue in meeting any cash lump sum payments if they are all
immediately retired [½]

[Marks available 15½, maximum 8]

[Total 17]

Parts (i) and (ii) were well answered.

For part (iii) candidates that were able to provide a broad range of ideas scored better.

Q4

(i)
The accounting standard used [½]
which will dictate how items are determined and disclosed [½]
and may prescribe the funding method or assumptions used [½]
Liabilities at previous year end [½]
split between actives, deferred pensioners and pensioner members [½]
Duration of the liabilities [½]
And sensitivity of the liabilities to the assumptions used [½]
Assets at previous year end [½]
including any annuity policies held [½]
Surplus/deficit at previous year end and movement to date [½]
the change in the surplus / deficit over the year including reasons for movement [½]
The value of liabilities accruing over the year (pensions cost) [½]
The increase in the past service liabilities over the year (interest cost) [½]
The investment return achieved on assets over the year [½]
Funding method adopted [½]
Key assumptions used [½]
e.g. discount rate, inflation and mortality [½]
Director pension costs [½]
e.g. accrued pension, contributions paid [½]

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Current investment strategy [½]
and performance figures over 1, 3, 5 years [½]
including notes on ESG [½]
Contributions made into the scheme by the company [½]
split by accrual, deficit contributions, augmentations and expenses [½]
Benefit outgo from the scheme [½]
split into different benefit type and expense payments [½]
Details of any special events - such as scheme closure or bulk transfer [½]
[Marks available13½, maximum 8]

(ii)
Collect the number of deferred members who took a transfer value and the amount paid out [½]
Consider splitting data into further sub-categories if sufficient data, [½]
such as by age, sex or type of employment (e.g. staff, executives) [½]
Data should be collected over a specified period of time [½]
E.g. over the last 10 years [½]
Period / groupings such that there is enough credible data [½]
Number of members and amounts paid should be compared against those in the scheme accounts over each scheme year for reasonableness [½]
or compared against cashflow information obtained from the administrator/company [½]
Analysis requires calculation of the number of deferred members taking transfer values as a proportion of the number of deferred members exposed to taking transfer values [½]
Can then take an average of this proportion over the period of time analysed [½]
E.g. 10% of deferred members take a transfer value each year [½]
Based on analysis, could set an assumption based on an expected proportion of members to take a transfer value each year [½]
Could set the percentage across all deferred members, or different for each sub-category of members depending on the results of the analysis [½]
E.g. 10% of staff deferred members take a transfer value at retirement, 15% of executive deferred members take a transfer value at age 50 (Marker note: or other example of an assumption which can be set where data has been split into sub categories) [½]
The analysis should exclude for any previous bulk transfer exercises so as to not skew the results [½]
The analysis may also be done looking at the proportion of liabilities transferred rather than proportion of members [½]
[Marks available 8, maximum 7]

(iii)
Results should not be used blindly [½]
Consider the purpose of the exercise and materiality of including an allowance for transfer values [½]
e.g., if the accounting basis is similar to the transfer value basis the results may only need to be approximate [½]
Consider the volatility in the results of the analysis, particularly if numbers transferring are small [½]
Consider the results in the context of identifying trends and for long term accounting rather than setting assumptions based on one off results [½]

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Period under investigation may not be typical and/or representative of future experience [½]
E.g. abnormal events [½]
Or significant random fluctuations [½]
E.g. bulk transfer value / ETV exercise took place over the period [½]
Or changes in legislation which led to any changes in member behaviour [½]
Changes in the way the data was recorded [½]
E.g. change in scheme administrator [½]
Or errors in data / data not credible [½]
Insufficient data to split into homogenous groups for analysis [½]
I.e. limited number of transfers over the period in question [½]
Changes in the balance of any homogenous groups underlying the data [½]
E.g. if data was split by occupation type / sex, membership could have changed over the period or since analysis performed [½]
Experience could be affected by economic cycles [½]
E.g. more transfers out during a recession where individuals are in need of cash [½]

[Marks available 9½, maximum 5]

[Total 20]

Parts (i) and (iii) were generally well answered.

For part (ii) better scoring candidates were able to present the steps necessary to complete an analysis of experience. Many candidates wasted time by presenting a long list of data requirements, which scored very limited credit. Credit was awarded for solutions presented on both an amounts and a lives basis.

Q5

(i)

The contribution income in each year exactly equals benefit expenditure in the same year no fund is established [½]
Contribution rate for any one year = benefit expenditure in that year / total salaries of the contributing population in that year [½]

(ii)

(Capped at 1 mark per method)

Smoothed PAYG [½]
Where a contingency reserve is built up each year as the contribution income is extremely unlikely to exactly match the benefit outgo [½]

Equalised PAYG [½]
Where contribution rates are fixed over a set number of years to provide stability in the contribution rate over that period [½]
Contribution rate calculated in advance so that expected income covers expected expenditure over the control period, though not necessarily in each individual year during the period. [½]

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General average premium [½]
Where contribution rate set at a level rate payable throughout the lifetime of the scheme [½]
At the inception of a scheme, the GAP contribution rate = prevent value of all benefit expenditure in all future years (including from new entrants) / present value of total salaries of the contributing population in all future years (including from new entrants) [½]

Terminal funding [½]
Contribution income required in any period is the amount required to finance the capital value of the benefits awarded in that period [½]
I.e. benefits are prefunded at the time they are awarded [½]
[Marks available 5½, maximum 4]

(iii)
Increase the flat rate of state pension [½]
to ensure it currently meets the minimum standard of living [½]
State pension increases each year [½]
In line with inflation or another fixed rate [½]
To help benefits keep in line with cost of living increases [½]
Reduce age at which individuals can access their benefits [½]
As emerging country, life expectancy may not be very high [½]
Reduce the minimum employment term before which individuals are eligible [½]
Reduce the minimum term of being a resident in the country [½]
Allowing individuals who immigrate into the country access to the state pension [½]
Provide a pro-rata benefit for those with fewer eligible years (resident or employment terms) [½]
Or remove the minimum terms entirely [½]
Apply means testing to target (increased) benefits more appropriately to those who need it most [½]
Reduce tax paid on state pension income or make it tax exempt [½]
[Marks available 7, maximum 5]

(iv)
The benefits being paid will increase so the contributions will need to increase [½]
to ensure the higher expected outgo can be met by the income [½]
If changes are made immediately then the impact on contributions is immediate, if there is a transitional period the impact may be more spread out [½]
As changes to the amount will impact immediately on contributions whereas changes to pension increases will feed in over time [½]
The government may try to raise the additional funds needed to pay for the increased state benefit elsewhere [½]
To avoid increasing the contribution rate payable by individuals [½]
Or increase the general taxation rate rather than the contribution rate for state pensions [½]
[Marks available 3½, maximum 2]

(v)
Educate individuals on the importance of saving for retirement themselves [½]
Encourage individuals to save for retirement themselves [½]

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Provide a savings plan for individuals to do this	[½]
Offer tax advantages to individuals to save for retirement	[½]
Encourage employers to provide pension benefits to their employees	[½]
E.g. through tax advantages	[½]
Encourage employees to join their company pension scheme	[½]
Compel employees to join their company pension scheme	[½]
Compel employers to provide pension benefits to their employees	[½]
and for employees to be auto-enrolled	[½]
and for employees / employers to contribute at a minimum level	[½]
Set up / regulate pension savings vehicles	[½]
Provide government guarantees or assurances in relation to private provision	[½]
Cap charges on private pension products	[½]

[Marks available 7, maximum 5]

[Total 17]

Parts (i) and (v) were generally well answered.

For part (ii) some candidates were unable to provide four different methods, and a significant minority missed the instruction that the government doesn't wish to fund in advance.

For part (iii), many candidates were unable to generate enough points to score well.

For part (iv) candidates frequently failed to connect their response to their answers for part (iii).

Better prepared candidates considered the timing of the impact of the options they presented in part (iii).

Q6

(i)

The objectives of Trustees and employer	[½]
And details on setting the financial assumptions for the previous valuation	[½]
Which may be set out in a statement of funding principles	[½]
Sponsor covenant	[½]
To inform on the level of prudence to be included within the assumptions	[½]
Legislation/guidance	[½]
As derivation of the assumptions or certain financial assumptions (e.g. discount rate) may be prescribed	[½]
Current investment strategy	[½]
And expected returns on assets	[½]
Which could be used to set the discount rate	[½]
Historical financial data	[½]
Such as historical equity returns	[½]
And historic price inflation	[½]
Current financial data	[½]

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This is highly relevant in setting financial assumptions [½]
E.g. current yields on fixed interest and index linked bonds [½]
And relationship between the two to provide an indication of future levels of the index [½]
To set an assumption for future inflation [½]
Including pension increases, perhaps with use of a Black Scholes model [½]
Consideration could be given to the central bank's / government's estimate of long term inflation [½]
Information on historic discretionary increase practices, if these are funded [½]
If the salary link has been retained following closure to accrual, then a salary assumption is required so may need data from company on expected future salary increases [½]

[Marks available 11, maximum 4]

(ii)
Assumptions:
Impact on inflation assumption [½]
Current yields on fixed and index linked bonds may have anticipated the higher expected inflation [½]
I.e. the difference between the two being higher [½]
Higher expected inflation will impact on assumptions linked to inflation [½]
Including pension increases in payment [½]
And in deferment [½]
Although perhaps not to the full extent if benefits are not fully linked to inflation and assumption reflects this [½]
However, the market may believe the high inflation is temporary [½]
In which case there could be little or no impact on financial assumptions as a direct result of the higher expected inflation [½]
Especially if the central bank's estimate of long-term inflation is used in setting the assumptions [½]
So inflation assumptions higher than those at the previous valuation [½]
Could impact on discount rate assumption [½]
As higher inflation expectations could lead to higher expected interest rate [½]
As monetary policy may be used to hit an inflation target this could lead to the interest rate being increased [½]
Which will lead to an increase in expected bond yields [½]
Which will lead to a higher discount rate [½]
So net discount rate may only slightly change or even be unchanged from that at the previous valuation [½]
May lead to changes in demographic assumptions such as [½]
(credit up to two sensible examples)
Higher withdrawal rates as employees seek higher salaries elsewhere [½]
Higher mortality due to reduction in living standards [½]

Value of assets:
Equity values may fall due to high inflation [½]
As increase in inflation could lead to high interest rates which could lower stock returns [½]
But could increase if equity investments are in oil companies [½]
Value of index linked government bonds is likely to increase [½]

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But this may be offset by the rise in interest rates and lead to an overall fall in values [½]
The LDI assets are likely to be those which match the change in the value of the liabilities [½]
dependent on the level of hedging [½]
with more hedging leading to a more matched result [½]
If the LDI investment provides full hedging against inflation and interest rates then overall the surplus or deficit is expected to be broadly unchanged [½]
If liability values have fallen more than the fall in value of the equities and index linked bonds then the LDI assets should have fallen in value [½]
If the values have fallen less than the fall in value of the equities and index linked bonds then the LDI assets should have risen in value [½]

Value of liabilities:
Higher inflation expectation could lead to the value of the index linked liabilities increasing [½]
Increase dependent on whether the increases have any caps [½]
And overall impact on the liabilities depends on the level of benefits linked to inflation [½]
With a higher inflation linkage in liabilities leading to higher liabilities [½]
But a higher discount rate could offset the increase from higher inflation expectations [½]
However, if considered current high inflation does not change long term expectations of inflation / or central bank's long-term expectation of inflation used
Then impact on liabilities not as material [½]
In which case liabilities not materially increased due to high inflation expectations [½]
As the discount rate affects all liabilities and the inflation rate affects only some of the liabilities the liabilities may have decreased overall [½]

[Marks available 19½, maximum 9]

(iii)
Solvency estimate would be based on the actuary's view of the cost of securing the benefits with an insurer [½]
In the absence of obtaining a quotation from an insurer [½]
Estimate of assumptions underlying insurer premium rates [½]
e.g., yields on high quality bonds which are likely to be used by an insurer to back the liabilities [½]
And allowance for profit margins expenses [½]
Valuing options and guarantees on a 'worst case' basis [½]
I.e. where they would increase the liabilities rather than decrease [½]
E.g. no allowance for cash commutation [½]
Including an allowance for expenses [½]
Including costs of winding up the scheme [½]
Could also provide coverage of different benefits provided by the scheme if funds are inadequate and some benefits are prioritised [½]
E.g. statutory pension increases to be benefits paid first, then other benefits on top of this [½]
If a salary link has been retained on closure to accrual, this will be assumed to cease on the date of the solvency valuation and deferred increases provided prior to retirement. [½]

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[Marks available 6½, maximum 4]

(iv)
Advantages and disadvantages for company:

The cost of the scheme is likely to be lower as a contribution to the insurer's profits and expenses is not required	[½]
Company could utilise some of the surplus	[½]
Which could be used to pay for the expenses of administering the scheme	[½]
Or take a refund	[½]
But this may lead to a large tax charge	[½]
Company could continue to generate a profit/loss credit in their company accounts	[½]
Strengthening the company's financial position	[½]
And avoids an impact on the balance sheet from settlement	[½]
Company retains the risks of the pension scheme	[½]
Including investment, inflation and longevity risks	[½]
With experience gains the cost of the scheme could reduce leading to more surplus	[½]
The time and expense involved in buying out the scheme is delayed / avoided	[½]
The company may be able to continue to use the scheme for manpower planning e.g. redundancy exercises	[½]

Advantages and disadvantages for the scheme managers:

Funding position could deteriorate	[½]
On both the funding and solvency bases	[½]
Due to changes in market movements	[½]
Or membership experience	[½]
So company would need to contribute to secure benefits with an insurer	[½]
Or even possibly needing to contribute to repair the deficit on the funding basis	[½]
Scheme managers retain their role of management of the scheme	[½]
But will question at what point will benefits be bought out	[½]
And will want to ensure the company will be able to back the scheme	[½]
Little risk of insurer default due to likely legislative requirements on insurers	[½]
But company covenant relied upon	[½]
However not so much given strong funding position	[½]

Advantages and disadvantages for members:

Members could benefit from possible improvements to benefits from the surplus	[½]
E.g. discretionary pension increases	[½]
And retain their existing member options	[½]
Whereas insurer may restrict options available to members	[½]
Although insurer factors could be stronger leading to higher benefits	[½]
Members retain their ability to receive benefits which require scheme manager discretion	[½]
As these discretionary elements could be removed by an insurer	[½]
Members retain their current benefits, whereas on buyout benefits may need to fit with the insurer's structure	[½]
Although inferior benefits are unlikely to be bought out, so buy out may lead to better benefits being insured	[½]
Members retain the current link to the scheme / employer	[½]
There may be intergenerational unfairness if the scheme continued as the benefits may be affected differently by experience over time	[½]

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[Marks available 18, maximum 8]
[Total 25]

Part (i) was generally well answered.

Part (ii) was more challenging and candidates who scored well were able to apply their knowledge to the situation presented and set out a well-structured answer.

Part (iii) was not well answered, with many failing to recognise that the scheme was closed to accrual and presented points in relation to actives being treated as deferreds for a solvency valuation.

[Paper Total 100]

END OF EXAMINERS' REPORT

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