INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2019 Examinations

Subject SA4 – Pensions and other Benefits Specialist Advanced

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.

Mike Hammer
Chair of the Board of Examiners
December 2019

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

1. 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.

2. 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.

3. 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.

4. 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.

5. Good 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.

6. 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.

7. 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.

8. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

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

This was seen to be a fairly challenging exam. There were some more challenging parts designed to make candidates think about the specific scenario set out in the question, where the better prepared did well.

A number of students failed to provide sufficiently detailed answers for question 2 where a lot of marks were available.

Some students also seemed to run out of time which highlights the need to plan during the exam.

As with previous years the 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 harder 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.

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.

Candidates should take note of the command verbs used to guide the depth given in their answers (a list of what is expected for each verb is available on the IFoA website).

Candidates should also note the number of marks available for each question as a guide of how many points they need to cover.

The pass mark was scaled to 55 and all candidates awarded an upward adjustment.

C. Pass Mark

The Pass Mark for this exam was 55.

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Solutions for Subject SA4 – September 2019

Q1

(i)

- Increased consistency across the organisation [1/2]
  as all central calculations done in the same way [1/2]
- Technical expertise can be pooled together in the new team [1/2]
- Calculation training can be done more quickly due to more opportunity to repeat similar work, which builds experience quickly [1/2]
- This may reduce the risk of errors [1/2]
- Lower costs and increased efficiencies due to
  - Central processes in place for similar jobs [1/2]
  - Process based work performed by lower cost staff [1/2]
    and lower cost environment, e.g. office space [1/2]
  - Ability to prioritise workloads across the organisation [1/2]
  - May lead to improved compliance with internal standards and processes [1/2]
- There may be issues around the quality of work performed [1/2]
- There could be transitional costs incurred [1/2]
- There could be increased IT risk
- The change is likely to concern staff [1/2]
  e.g. career progression [1/2]
- and may lead to morale issues [1/2]
- Process based approach may be overly inflexible for some jobs [1/2]
  e.g. non-standard calculations or complex benefit structures [1/2]
- And could concentrate technical risks within the new team [1/2]
  and reduce calculations expertise outside the team [1/2]
- There may be difficulties in determining who has responsibility for scrutiny of results provided [1/2]
- The standardisation process could produce a disconnect between scheme knowledge and technical expertise [1/2]

[Max 6 Marks]

(ii)

- Overall strategy [1/2]
  - What is driver for establishing Actuarial Service team, cost savings are primary driver [1/2]
  - How quickly will the team be operational [1/2]
  - How will success be measured [1/2]
  - What are the KPIs to focus on [1/2]
  - How will the new team be overseen [1/2]
- Location of AST [1/2]
  ,overseas may be cheaper but likely to have challenges including:
  - Language barrier [1/2]

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  - Time differences [1/2]
  - Remote working [1/2]
  - Recruitment / Retention of staff [1/2]
- Management / structure of team [1/2]
  - Skills required, size of team [1/2]
  - Oversight [1/2]
  - IT requirements, such as systems and training [1/2]
  - What changes are needed to the overall structure of the company in light of this change [1/2]
- Allocation of responsibilities [1/2]
  - As the work is being separated between multiple teams there is a question as to how the responsibility for delivery of work is allocated [1/2]
  - and how the teams interact [1/2]
  - cost allocation between AST and actuary [1/2]
    and who benefits from efficiencies / bears cost of problems [1/2]
- Compliance [1/2]
  - How is compliance with professional standards maintained in this new structure [1/2]
  - Are any changes needed to the company's internal standards in light of this change [1/2]
  - Are there any data protection issues that need to be considered [1/2]

- Scope of work performed by AST [1/2]
  - Will the team be limited to standard projects such as valuations [1/2]
  - which are likely to be easier to integrate into a process driven environment [1/2]
  - Or will they work more widely [1/2]
  - Which would help to take advantage of the technical expertise within the team [1/2]

[Max 6 Marks]

(iii)

- It's likely to be more difficult for actuaries to understand the work that has been done [1/2]
- and gain confirmation that the required level of checking has been done [1/2]
- This will make it more difficult to sign off that the work is correct [1/2]
- Where there are scheme specific items these may not fit well in the process[1/2]
- If the AST is located overseas then this could lead to confusion over the standards that apply to the work and making sure that these are adhered to [1/2]
- If the checking is split amongst the teams (eg lower level checking done in AST and higher level review by the signing actuary) then there is a danger that either some of the required checks are duplicated or not performed by either team [1/2]
- It may be hard to completely understand all of the material assumptions used by AST [1/2]

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- There may be difficulties in communication with clients given the separation between the Actuary and the work being done [1/2]
  - and in particular if there is a need to get into detail about the work that has been done [1/2]
  - Or describe the technical details of the work [1/2]
- There may be conflicting work that cannot be done in the same team, for example when work is done for a sponsor and a trustee of the same scheme [1/2]
- Data handling and compliance with data protection regulations may be more challenging given the more regular transfer of data [1/2]
- and difficulties between jurisdictions if data laws are different between the locations of the firm and the AST [1/2]
- The principles of the Actuaries' Code address many of the professional challenges that would be faced [1/2]

[Max 4 Marks]

(iv)

- Valuation method [1/2]
- Duration [1/2]
- Any approximations made in the calculations [1/2]
- Data issues [1/2]
- Demographic assumptions [1/2]
- Annuities at retirement [1/2]
- Details of the process and checks done within the AST [1/2]
- Confirmation of the checking that has been performed within the team [1/2]
- Valuation of assets [1/2]
- Allowance for discretionary practices and beneficial options [1/2]
- Split of data and liabilities between deferreds and pensioners [1/2]
- Split of data and liabilities between males and females [1/2]
- Split of pensioner data and liabilities between members and dependants [1/2]
- Valuation results using current data and previous assumptions [1/2]
- Initial analysis of surplus or reconciliation of liabilities to previous results [1/2]

[Max 3 Marks]

(v)

- This will depend somewhat on the checking that has been done elsewhere and the robustness of this checking. [1/2]
- However the actuary is likely to want to:
- Ensure that relevant checks have been done to ensure that: [1/2]
  - Data, including cashflow data and possibly member data [1/2]
  - Assumptions [1/2]
  - Any calculation adjustments [1/2]

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- have been processed correctly in the calculations [1/2]
- and are the values that are intended to be used [1/2]
  - e.g. that assumptions are those set for the work and as communicated to the client [1/2]
  - and that any roll forward methodology used is appropriate [1/2]
- The actuary may wish to perform basic reasonableness check from first principles and / or [1/2]
- Check the change against the previous years' accounts is in line with expectations and / or [1/2]
- Check the results against similar exercises [1/2]
- Check that the correct benefits have been valued [1/2]
  especially any unusual or non-standard benefit features [1/2]
- Check sample members from first principles [1/2]
- Check for any missing data where assumptions may have been made [1/2]
- The actuary will want to ensure that the process followed to produce numbers is in line with:
  - Internal guidance [1/2]
  - Any external guidance or best practise [1/2]
- Check the analysis of surplus to ensure this looks reasonableness [1/2]
  - i.e. understand the drivers behind the change from last valuations [1/2]
  - And that the story of what has happened since the last valuation is reasonable given contextual knowledge [1/2]
- The Actuary may wish to ensure that, if new data has been used, reasonableness checks have been performed on the data [1/2]

[Max 8 Marks]

(vi)

Assumptions:

- Average age for deferreds is liability weighted so appropriate for projected term to retirement [1/2]
- Annuity values used are weighted by gender [1/2]
- And include allowance for spouse pension/future mortality improvements [1/2]
- Pensioner annuity value assumes no dependants pensions [1/2]

Other appropriate assumptions given credit [max 2]

Calculation:

Total deferred liability at date of valuation: 2,544 * £3,944 = £10.034m [1/2]

Present value: 10.034 * (1.012) ^ - 12 * 18 = £156.5m [1]

Total pensioner liability: 5,438 * £6,544 * 14 = £498.2m [1]

Total liability: £655m. Given the approximations, this seems reasonable [1/2]

Credit given for any reasonable calculation where the annuity value is within the expected range.

[Max 5 Marks]

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(vii)

- The interface between actuaries and the AST is not working as intended and leads to:
  - substantial interaction between the team which hurts efficiency [1/2]
  - actuary not yet confident in output so still performing lots of additional checks [1/2]
- A possible solution would be to improve scope work more clearly and completely in advance [1/2]
- The work in AST may be being performed at too high a level with staff being overqualified for the work they are doing [1/2]
- This may be challenging to resolve in the short term but longer term an effort could be made to bring in staff at an appropriate level. [1/2]
- Any staff bought in to work in the AST may be underqualified for the role and therefore inefficient [1/2]
- The mitigation for this will be around enhanced training and possibly more focus on recruitment and the team structure to ensure support is available [1/2]
- This could just be teething issues as part of the setup process and future efficiency will improve. [1/2]
- However management should monitor closely to determine whether this is the case [1/2]
- The work undertaken by the AST may be more complex calculations than anticipated [1/2]
- To address this there could be a review of which calculations should be covered, assess future the requirements and reassess cost [1/2]
- The AST workload could be heavier / lighter than anticipated leading to costs associated with recruitment or overtime / redundancies or idle resources and work being completed at the wrong level [1/2]
- The scope and resources of the AST would need to be kept under review [1/2]
- There could be problems in recruitment and retention of team members leading to higher remuneration requirements and recruitment costs even over the short term [1/2]
- Review expertise requirements of AST members and consider incentives and promotional opportunities [1/2]

[Max 3 Marks]

[**Total 35]**

1 (i) This was generally well answered. There were lots of responses that mentioned a time saving compared to work being done in the client teams and thinking this equated to efficiency.

1 (ii) A number of responses demonstrated little or no experience of this business model. Some candidates thought that calculations being standardised would lead to the same benefits being valued in the same way for each client. It was surprising that few answers

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mentioned off-shoring, the impact of a central team on processes across the company and the division of responsibilities.

1 (iii) This was part was often not answered very well. Many candidates focussed on what the APS and Actuaries code covered rather than state how having another team do the calculations impact certain aspects of the APS and Actuaries Code. Very few candidates covered data protection and conflicts of interest issues. The better answers focussed on the real life issues faced.

1 (iv) This was generally well answered with the better candidates providing sufficient detail to get full marks.

1 (v) This was generally well answered. Some candidates focussed on how to check data rather than comment on the overall range of checks that an Actuary could do. Hardly any candidates linked their answer to the question by stating that the level of checks depends on the process put in place with the new team and the level of checks they carry out.

1 (vi) The better candidates scored well with this relatively simplistic calculation.

1 (vii) This part provided a wide range of answers, with the better candidates providing sufficient detail to score well.

Q2

(i)

Reasons for change in funding level

- Most likely reasons for the change in funding level is:
  - changes in discount rate is the key driver behind the increased liabilities [1]
  - Discount rate change of 1.4% pa may lead to
    - An increase of liabilities of around 25% [1/2]
    - Based on a duration of around 20 years [1/2]
- Important to understand the reason for the fall in discount rate [1/2]
  - It could be due to changes in markets and a weakening of expected return [1/2]
  - Or a change in investment portfolio which leads to a lower expected return [1/2]
  - Or changes in legislation requiring a more stringent approach to deriving the discount rate [1/2]
  - Or more prudent funding, for example as a result of a weakening covenant [1/2]
  - Or move to a more prudent valuation method, such as mark to market [1/2]
- Average salary has increased by more than assumed (11% increase in 3 years compared to the assumed level of 2.5% pa) [1/2]

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- In terms of the salary increases that have been awarded it is important for the trustees to understand the reasons for this [1/2]
  - Is this due to a specific policy enacted by the company [1/2]
    - For example in response to retention and recruitment issues [1/2]
  - Or a one off increase that isn't expected to be repeated [1/2]
    - For example to comply with minimum wage legislation [1/2]
  - Or a change in the definition of pensionable payments [1/2]
- It would also be useful to know whether the higher salary increases apply to all staff or a cohort of staff [1/2]
- The salary increase assumption has not changed since the previous valuation which suggests that the higher salary increases may not be expected to continue in to the future [1/2]
- The average salary has increased from £22,000 to £24,500 over three years[1/2]
  - Which is just over 11% over the three years [1/2]
  - Or around 3.5% per year [1/2]
  - Compared to an assumption of 2.5% [1/2]
- This might be expected to lead to an increase in liabilities of around 3% of the active liability [1/2]
- The pensioner payroll has increased by around 5% over three years which equates to 1.5% - 2% pa (excluding the impact of new pensioners and deaths) [1/2]
  - This is broadly in line with the assumption at the previous valuation and suggests that there hasn't been any significant pension increase experience that has affected the funding level [1/2]
- Other key assumptions haven't changed including
  - The expected level of future pension increases in payment [1/2]
  - Or in deferment [1/2]
- Other areas to look at include:
  - Actual asset returns, these have been around 16% over the three years (ignoring cashflows) which is slightly higher than the assumptions at 2016 [1/2] therefore resulting in an increase in the funding level, perhaps around 2% [1/2]
    - However large cash movements could distort this [1/2]
  - Changes in demographic assumptions [1/2]
    - Main changes that might affect the liabilities may included
      - Life expectancy, either base tables (which may be based on scheme experience), or [1/2]
      - Future improvements which are more likely to be based on expectations around the general population [1/2]
  - Contributions over the period and whether the sponsoring employer paid the required rate [1/2]
  - We might generally expect the sponsor to pay a lower rate than the future service contribution rate as they will want to run down the surpluses. [1/2] This appears to be the case here where contributions looks slightly lower than the cost of accrual [1/2]
  - Therefore we might naturally expect the scheme surplus to reduce over time [1/2]
- Other reasons for the change could be:

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  - Changes in benefits [1/2]
  - Change in approach to valuing benefits, such as options and discretionary practices [1/2]

Actions to take may include:

- The actions will depend on trustee powers under legislation and scheme documentation, [1/2]
  employer consultation or agreement may be required [1/2]
  and legal and actuarial advice should be sought [1/2]
- Asking the sponsoring employer to contribute additional income to the pension scheme [1/2]
- In any case they should agree a recovery plan that will bring the scheme back to full funding [1/2]
  - This should have reference to any prevailing legislation [1/2]
  - and should aim to bring the scheme back to a fully funded status in the shortest possible time [1/2]
  - However it is important that the employer is still able to invest in their business [1/2]
  - The future health of the scheme depends on the health of the sponsoring employer [1/2]
- Any additional income could be in the form of a lump sum or additional regular contributions [1/2]
  - But the impact on the sponsors business should be considered [1/2]
  - As the trustees have a vested interest In the sponsor remaining an ongoing concern and being able to support the scheme in the long term [1/2]
- Use of contingent assets or contributions could be a possibility [1/2]
  as could a parental guarantee [1/2]
  although these may not be commercially viable for the sponsor [1/2]
- Consider any discretionary benefits paid out and whether it is still appropriate to provide this. [1/2]
  - In particular if any expectations have been built up in terms of discretionary benefits this could be more problematic [1/2]
  - And the trustees will need to consider any wording around the payment of these discretionary benefits [1/2]
- The trustees will be very interested in the sponsor covenant, ie how willing and able the sponsoring employer is to make good any deficit [1/2]
- If the sponsor covenant is weak then trustees have more of a reason to be concerned [1/2]
  - If it is feasible then the trustees may ask for some of form of guarantee from the sponsor or any parent company [1/2]
- The sponsor covenant is likely to influence the risk appetite of the trustees with a stronger covenant enabling the trustees to have a higher risk appetite than would otherwise be the case [1/2]
- The trustees may wish to reconsider the investment strategy in light of these results [1/2]
  - In particular do they want to target a more aggressive strategy in order to generate higher returns [1/2]

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  - This may involve increasing the exposure to equities and other high returning assets [1/2]
  - Or do they now have a lower risk appetite that may suggest a lower risk investment strategy is more appropriate [1/2]
  - This is likely to involve a move towards gilts and high quality corporate bonds [1/2]
- They may also want to consider other ways to manage the risks around the scheme, [1/2]
  - for example through buy-outs of some liability, [1/2]
  - the use of insurance, or [1/2]
  - member incentive exercises [1/2]
- Although in many cases these will increase the expected costs and worsen the funding level [1/2]
- But they will reduce the risk associated with the scheme [1/2]
- Other actions could be to reduce scheme benefits, such as increasing the retirement age, [1/2]
  but this may not be possible for accrued benefits [1/2]
  and is likely to be unpopular with members [1/2]
- Similarly closing the scheme to new members or future accrual is an option [1/2]
- As would be a review option terms and consent requirements, particularly if beneficial [1/2]
- The trustees should not overreact to this given the historical funding position of the scheme [1/2]
  - In particular if the funding deficit is due to short term issues such as [1/2]
    - One off salary experience, or [1/2]
    - Market conditions [1/2]
  - Then it may not be appropriate to make any significant changes to the scheme as it is likely that such issues will work themselves through [1/2]
  - For example through a more conservative salary policy being adopted in future [1/2]
  - Or future changes in market conditions [1/2]
- Therefore doing nothing may be a valid option [1/2]
- Although the trustees will probably want to monitor the scheme closely and may wish to see additional out of cycle valuations [1/2]
- or other ways of measuring the financial health of the scheme such as a closer review of investment performance [1/2]
- The trustees will need to consider the prevailing legislative and regulatory environment in any action they take [1/2]
- And they may wish to contact any regulatory body for advice [1/2]

[Max 30 Marks]

(ii)

- The employer is understandably concerned about the reduction in funding level that they have seen since the previous valuations [1/2]

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- And the possibility that they may need to contribute more money to the scheme [1/2]
- taking it away from other areas such as investment opportunities and [1/2]
- Employee remuneration [1/2]
- The value of the opportunity cost for the sponsoring employer is likely to determine precisely how worried they are about paying additional pension contributions [1/2]
- Although the actual immediate impact on the contributions paid by the employer will depend on a number of factors including: [1/2]
  - The deficit recovery period adopted for the valuation [1/2]
  - The prevailing regulatory requirements regarding the targeted level of funding [1/2]
  - The views of any regulator regarding the contributions that need to be paid by employers, for example whether they allow employers to stagger the increases in contributions [1/2]
- The employer could see to what extent it would be possible to negotiate contributions with the trustees [1/2]
  such as with the use of contingent contributions [1/2]
  or the use of financial instruments such as contingent assets and parental guarantees [1/2]
- Annual valuation updates so that the employer can take advantage of any improvements in funding level and an associated reduction in future contributions [1/2]
- Consider any impact on company accounting disclosures and investment in the business [1/2]
- The employer will want to understand any changes to the assumptions and may be able to challenge them from both technical viewpoint [1/2]
  and particularly whether the discount rate correctly reflects the level of sponsor covenant [1/2]
- If pension costs are increasing then it may be worth the employer examining alternative uses for pension and whether the current level of provision is appropriate. [1/2]
- In particular they may wish to consider
  - The value placed on pension benefits by employees [1/2]
  - The level of pension offered in competitor firms [1/2]
  - Alternative uses for the contributions [1/2]
- However the reasons for the reduction in funding level and subsequent increase in employer costs may well be fairly temporary [1/2]
  - The increase in liability due to salary experience are in the company's control and an area where they should consider if changes to the scheme are needed [1/2]
    - E.g. by considering the costs of pension payments when making salary decisions [1/2]
    - Or by limiting the increases in salary that are taken into account for determining pensionable salary [1/2]
    - Or by moving to a career average benefit structure [1/2]
  - It is important to ensure that the sponsoring employer understands the impact of pay increases on final salary liabilities [1/2]

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- Similarly the discount rate reduction since the previous valuation may only be temporary (due to market conditions) or [1/2]
- something that the employer can influence [1/2]
  - For example the scheme may now be investing in less risky assets that yield a lower expected return [1/2]
  - If this is the case then the sponsoring employer may wish to influence the use of higher returning assets to reduce the long term cost of the scheme [1/2]
- Although it is also possible that a more conservative investment strategy is now being pursued [1/2]
  - Which will increase the costs for the employers [1/2]
  - And therefore the sponsor may wish to try to influence this to pursue a more aggressive strategy that reduces expected long term costs [1/2]
- The employer could propose incentive exercises to help manage the size of the liabilities [1/2]
- If the sponsor has decided that they would like to cut back on pension benefits then there are a number of options including [1/2]
  - Closing the scheme to new members [1/2]
  - Or future accrual [1/2]
  - Reducing the level of benefits, [1/2]
  - there may be protections in place about reducing the value of benefits already accrued but it should be possible to reduce the benefits for future accrual [1/2]
  - Increasing member contributions, [1/2]
  - this is likely to lead to significant industrial relations issues as it will reduce the take home pay of employees [1/2]
- The employer should consider the impact of such changes on employee relations and any possible recruitment and retention issues. [1/2]
- However, it should be emphasised to the employer that the funding position at any given date is only a snapshot of the scheme and we would expect the funding level to have quite a high level of variance over time, particularly where assumptions are based on current market expectations. [1/2]
- Similarly the sponsoring employer may wish to consider any discretionary benefits that are paid out (to the extent that they are able to do so) [1/2]
- And any other protections for the scheme such as reduction of transfer values out of the scheme [1/2]
  or changes to options terms [1/2]
- Each of these measures may require trustee sign off depending on the prevailing legislation and scheme documentation [1/2]

[Max 15 Marks]

[Total 45]

Many candidates struggled to provide sufficient detail to score well.

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2 (i) The better candidates identified the key areas of discount rate and salary inflation as the key reasons for increasing liability. However, more detail could have been provided on these assumptions and also how they link into the proposed assumptions for the current valuation. Most candidates seem to identify the actions that could be taken but ended up focussing on actions that were relevant for part ii)

It was disappointing that a number of candidates answered at least some aspects of this question from a general reasoning approach despite there being information available to calculate an actual cause rather than speculate on what the cause might be – this was particularly the case with the salary and inflation experience. Having said that, the causes of the funding reduction were better answered than the potential actions where there was often too much detail on each action instead of a wider range of possible actions and this may have contributed to the time pressure.

2 (ii) Very few candidates picked up the marks available from considering the employer's ability to control salary policy but this may have stemmed from them not really identifying the effect of salary experience in part (i).

Q3

(i)

- Affordable member contributions, [1/2]
  members need to be able to join the scheme without having a significant impact on their take home pay [1/2]
- Benefits that give member sufficient income in retirement, [1/2]
  it is important that the scheme provides adequate benefits for members in retirement [1/2]
- There could be a preference for a defined benefit rather than defined contribution [1/2]
  so that the employer bears the main risks [1/2]
- Insurance for life events such as death in service or ill-health, [1/2]
  this is likely to be highly valued by employees who will appreciate the security it provides [1/2]
- Benefits for partners and other dependents [1/2]
- Advanced funding [1/2]
  to provide some security to the member benefits in the event that the company finds itself in financial difficulties [1/2]
  or ensure that the assets of the scheme are ring-fenced from the employer such as through a trust. [1/2]
- Flexibility and options to meet different circumstances, for examples [1/2]
  - Early and late retirement [1/2]
  - Commutation options [1/2]

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- Certainty over the level of benefits, [1/2]
  therefore a defined benefit scheme is likely to be far more preferable for the representatives [1/2]
  giving predictable benefits so members can plan for retirement [1/2]
- Simple to understand and communicate [1/2]
  so that members can make informed retirement decisions [1/2]
- A simple structure so that it is easy for members to understand and appreciate [1/2]
- A tax efficient scheme [1/2]
  to maximise the benefits payable to the employees [1/2]

[Max 6 Marks]

(ii)

- This is a risky investment strategy that exposes employees to significant risks that benefits won't end up being paid by the firm, [1/2]
  for example:
  - Matching - some matching as immature scheme and if DB scheme is final salary [1/2]
    but then some mismatching by currency [1/2]
  - It leads to an expectation of higher returns but increased risk of poorer returns [1/2]
  - There would be a lack of diversification by asset class [1/2]
  - Although it does depend on what was invested in previously [1/2]
  - As the scheme is immature, the assets will be low and duration long so the strategy may in fact be appropriate [1/2]
- The representative are likely to seek guarantees from the employer around the benefits [1/2]
  - In particular the representative is likely to want confirmation that the employer will make up any shortfall due to poor investment returns [1/2]
  - If such a guarantee is not forthcoming it is hard to see how the employee representative can agree to this investment strategy [1/2]
- You will want to consider the risk appetite of their members and determine whether it is compatible with an investment of this sort [1/2]
- The protection for members will be part of the consideration, if there is a strong safety net or if the employer has a strong covenant then the representative may not be as concerned [1/2]
- As the pension scheme is funded over the long term and should not be overly influenced by short term experience (such as over 5 years) [1/2]
- If there are any discretionary benefits within the scheme structure then this investment strategy may make it more likely that such benefits are paid [1/2]
- If there are not any discretionary benefits you may seek to add these, for example extra pension contingent on good investment performance [1/2]
- There are likely to be some measures that could be put into place to try to minimise the risk around these investments, for example [1/2]
  - Only investing in reputable companies [1/2]

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- Seeking high quality investment advice [1/2]
- Making use of options as appropriate to reduce risk [1/2]
- Ensuring that the portfolio is sufficiently diversified [1/2]

[Max 7 Marks]

(iii)

- The scheme has only been in operation for a relatively short time and so any deficit is likely to be small in monetary terms [1/2]
- Therefore large scale redundancies seems to be an overreaction to the situation [1/2]
- Cost of redundancies, including any costs to the scheme, needs to be considered [1/2]
- Funding levels can be quite volatile [1/2]
  and so looking at them in isolation could be misleading or lead to suboptimal decisions [1/2]
- Are the valuation results comparing like for like valuation methodology [1/2]
  and what is the funding position at a more recent date [1/2]
- Analyse reasons for deficit to determine whether deficit is permanent and likelihood of future deficits as will impact on actions [1/2]
- Although 65% funded, the actual deficit may be small with time to correct (as new immature scheme) [1/2]
- There are likely to be a number of options that would help to make the savings if they really are required, these include:
  - Increasing member contributions [1/2]
  - Cutting back on future accrual [1/2]
  - Cutting back past benefits [1/2]
    although this may not be possible if accrued benefits are protected [1/2]
  - Moving to a lower risk arrangement, e.g. defined contribution [1/2]
  - Other options such as salary freeze, remove any discretions, review option terms [1/2]
- The employee representative is likely to prefer changes to future benefits [1/2]
  if any changes at all are required, this is because it will give staff a chance to decide for themselves whether to contribute to the scheme going forward given the new benefit structure [1/2]
- Past service changes will penalise existing accrual which seems unfair and could reduce member confidence in the scheme [1/2]

[Max 7 Marks]

[Total 20]

3 (i) This was the best answered question with easy marks available. However, some candidates strayed into trying to consider the employer's objectives.

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3 (ii) This part was not particularly well answered. Many candidates went for general equity properties rather than thinking about the specifics of the scheme. Good candidates spotted it was small, immature and tailored their answer accordingly.

3 (iii) The better students realised it could be an overreaction based on likely small size of deficit in a new scheme. Some candidates adopted an unhelpful adversarial approach by raising points about the problem being the employer's fault because they pursued a risky investment so they should sort it out and suggesting that they would threaten strike action.

[Paper Total 100]

END OF EXAMINERS' REPORT

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