

# INSTITUTE AND FACULTY OF ACTUARIES

## EXAMINERS' REPORT

April 2022

### CP1 – Actuarial Practice Core Practices Paper One

#### Introduction

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

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

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

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

Sarah Hutchinson  
Chair of the Board of Examiners  
July 2022

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

The aim of the Actuarial Practice subject is that upon successful completion, the candidate should understand strategic concepts in the management of the business activities of financial institutions and programmes, including the processes for management of the various types of risk faced, and be able to analyse the issues and formulate, justify, and present plausible and appropriate solutions to business problems.

This subject examines applications in practical situations of the core actuarial techniques and concepts. To perform well in this subject requires good general business awareness and the ability to use common sense in the situations posed, as much as learning the content of the core reading. The candidates who perform best learn, understand, and apply the principles in CP1 rather than only memorising the core reading.

The examiners set questions that look for candidates to apply the principles in CP1 specific to the situation set out in the questions, having read the question carefully. Many candidates gain few marks by writing around the subject matter of the question in a more general fashion. Detailed specialist knowledge is not required, nor is very detailed development of particular points.

Good candidates demonstrate that they have planned their time well to understand the breadth of the question and to structure their answer - this is a big advantage in making points clearly and without repetition. This also enables candidates to use the later parts of questions to generate ideas for answers to the earlier parts.

Time management is important so that candidates give answers to all questions that are roughly proportionate to the number of marks available.

The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates approaching the subject for the first time are advised to use these points to aid their revision.

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.***

Candidates performed better on paper 1 with the average mark being 7% higher than paper 2.

There were two case studies on paper 2 and where there was a high number of marks allocated candidates appeared to be inadequately prepared. Well prepared candidates structured their answers to achieve the marks allocated. Many candidates did not utilise the information provided in the case studies which meant they were not awarded some relatively easy marks.

## **C. Pass Mark**

The Pass Mark for this exam was 54  
1187 presented themselves and 506 passed.

## Solutions for Subject CP1 Paper 1 – April 2022

### Q1

This regime will be suitable if (compared with alternatives - including no regulation at all) it's the one that will best meet the objectives of regulation, namely: efficiency of market, consumer protection, confidence in market, reduced financial crime at the lowest cost (compared with benefits). [2]

It will need to be operable both for companies and the regulator. [1]

#### Advantages

Flexibility. This regime is suitable for a rapidly changing market in terms of increasing product ranges and distribution channels. Because the alternative of, say, a rule based regime would then mean frequent changes to the required rules. [2½]

#### Disadvantages

The regime is not normally considered suitable for developing countries/markets, but only for more mature markets. [1]

It relies on sufficient expertise of the regulator to specify the outcomes, sufficient resources of the regulator to monitor and punish poor outcomes, and sufficient understanding and resources of the companies to meet the outcomes. A lot of judgment is required to operate effectively. The regime also depends on integrity and stability of the companies. All of these may be lacking in a developing country. A combination of systems (e.g. part outcomes-based, part rules-based) may be best. [4½]

Insurance companies in a developing market may not have sufficient understanding and resources to ensure the consumer outcomes are met [1]

It could be expensive for insurance companies to meet the requirements, and therefore could pull out of the market leaving the regulator with nothing to regulate [1]

A combination of systems (e.g. part outcomes-based, part rules-based) may be best. [½]

[Total marks available 13½, maximum 5]

*Generally well answered. The stronger candidates had sufficient breadth to the points made and considered the advantages and disadvantages well. Also the stronger candidates tailored their answer to the types of country and market and then argued in comparative terms against the more standard alternatives.*

### Q2

#### (i)

Admin systems should be designed to pay out the guaranteed amount when a guarantee is in the money. Also to reflect guarantee in any surrender quotes/illustrations. [1½]

The system will need to be able to hold/use a new product code [½]

A more difficult issue is whether to tell a customer that a forthcoming guarantee is in the money if the customer seeks, for example, to surrender the policy a few months before the guarantee date. The system should allow for this e.g. prompt staff to explain to customer or issue letters to customers at appropriate time(s). [3]

Admin system needs to cope with higher charges being imposed compared with any non-guaranteed contracts. [1]

Admin system needs to cope with possible high volumes of surrenders (switches) from

old to new contract version. [1]  
 Admin system will need to output additional fields to valuation/modelling system  
 e.g. premium paid. [1½]  
 Some admin system changes may be delayed beyond launch of guaranteed bond,  
 so long as in place by time they are needed (e.g. 5<sup>th</sup> anniversary). [1½]  
 [Marks available 10, maximum 2]

(ii)

Product design

Higher charges could be imposed. [½]  
 The choice of unit linked funds could be restricted [½]  
 e.g. to cash/fixed interest and lower risk equity funds. [½]  
 Strict application of time period that the guarantee applies for [½]  
 e.g. have to submit surrender claim by midday on 5<sup>th</sup>/10<sup>th</sup> anniversary. [½]  
 Fund switches could be restricted (e.g. lose guarantee if switch, or starts a new 5/10  
 year period). [½]  
 Switches to new contract need to start a new 5/10 year period. [½]  
 Maximise persistency e.g. customer retention programmes [½]

Risk management techniques

Liability hedging - involves choosing assets which match the liabilities so that they  
 move consistently with each other, thus hedging the underlying market risk that arises  
 from the existence of the guarantee e.g. using appropriate put options in the case of  
 this guarantee. [2½]  
 Option to cover two different policy anniversaries likely be unavailable, may need to  
 estimate split by an assumed surrender pattern. [1]  
 Guarantees and options can be hedged dynamically, that is by rebalancing the  
 underlying hedging portfolio as market conditions change. [1]  
 Hedging techniques are made more difficult because the theoretical matching assets  
 are not always available even at single anniversary dates .[1]  
 May be able to transfer the cost/risk to a third party to run the fund and cover the  
 guarantee e.g. specific type of fund reinsurance/coinsurance. [½]  
 Caps could be placed on the amount of business e.g. maximum premium per policy or  
 limits on volume of new business. [1]  
 There should be monitoring of expected and actual costs. [½]  
 Limits should be set above which product would be withdrawn (e.g. big interest rate  
 or equity index changes; assets under management) [½]

[Marks available 12, maximum 5]

**[Total 7]**

*In Part (i) The “how” was often overlooked by candidates, with most speaking in general terms which resulted in full marks not being awarded*

*In Part (ii) only well prepared candidates considering the question widely enough to generate the points required.*

**Q3**

(i)(a)	
to survive the financial consequences of negative events (with example), maintaining standard of living	[1]
to save up for specific future liabilities (with example)	[1]
avoid borrowing	[½]
(i)(b)	
deal with financial consequences of adverse events or falls in trading volumes ; smooth profits	[1]
to fund future expansion, avoid borrowing	[1]
to invest in research or new equipment to improve the business	[½]
to finance stock and work in progress (i.e. cashflow management)	[½]
(i)(c)	
to protect against the risks of insurance business	[½]
setting up systems to monitor and administer liabilities	[1]
to meet new business strain	[½]
to meet solvency and regulatory capital thresholds	[½]
to sustain/smooth dividends.	[½]
(i)(d)	
May not need to, as can borrow or tax.	[1]
However may want to build reserves to smooth over the economic cycle or due to timing differences between tax income and government spending	[1½]
	[Marks available 11, maximum 4]
(ii)	
Advantages	
The main advantage is access to capital markets, and the ability to raise equity funds here to finance expansion. Also possibly then easier to raise greater debt e.g. because of greater market prominence/size/credibility.	[2½]
More volumes and types of products could be offered, particularly those that are capital intensive and less attractive to a mutual but more profitable.	[2]
The new company may access more dynamic management or discipline.	[½]
Members may be more inclined to persist e.g. because company may be bigger/more secure.	[1½]
All parties may benefit from increased economies of scale that may follow from an expanded company.	[1]
Disadvantage	
Disadvantage is loss of independence if equity is given up.	[1]
Members may prefer a mutual and lapse policies, fearing reduction in benefits/sharing of profits.	[2]
Shareholders may demand excessive returns, leading to lower business volumes.	[1]
The company may suffer dis-economies of scale (e.g. business more complex, less specialised therefore less attractive to customers).	[1]
Takes time and may be costly e.g. regulations/public disclosures required. These overheads are also added to yearly ongoing extra costs.	[2]
	[Marks available 14½, maximum 4]

**[Total 8]**

*Part (i) This was very well answered with most candidates scoring full marks. There was a maximum of 1 mark available for each (a)-(d).*

*Part (ii) This part was also very well answered with most candidates writing sufficient points to score most of the marks on offer.*

**Q4**

(i)

Mortality is an important assumption with a large financial impact, because payments are made until death. [1]

Monitoring the experience is a fundamental part of the actuarial control cycle. [1]

The actual experience should be monitored to check whether the method and assumptions adopted for financing the benefits continue to be appropriate to reflect expected future experience e.g. (mortality improvement). And, if not, what changes should be made to achieve the desired level of solvency. [3]

To monitor any trends in experience, particularly adverse trends, so as to take corrective actions e.g. ask sponsor for more money e.g. adjust discretionary increases e.g. improve evidence of existence exercises [2½]

To provide information to management and other key stakeholders e.g. trustees to manage any issues/ask sponsor for more money e.g. members get a regular report on the progress of the scheme e.g. sponsor decision to buy out with insurer. [2]

It may be a regulatory requirement. [½]

[Marks available 10, maximum 4]

(ii)

The basic requirement is that there is a reasonable volume of relevant, stable, consistent data, from which future experience and trends can be deduced. [1]

The data ideally needs to be divided into sufficiently homogeneous risk groups, according to the relevant risk factors e.g. by age, sex, staff vs exec, annuity size. [2]

However, this ideal must be balanced against the danger of creating data cells that have too little data in them to be credible. [1]

As the pension scheme is large, it should have credible/high volumes of data. But even with a large pension scheme, there may be few lives at extreme old ages so an analysis of the mortality rate at individual extreme ages may lack credibility. It may be necessary to group data on deaths into five-year age bands rather than single year bands in that region. [2½]

As well as data on the number of lives dying, it is necessary to have data on the exposed to risk/number of lives alive. An analysis of experience is not valid unless experience and exposed to risk are matched. [1½]

An analysis by annuity per annum may be more revealing than one based on number of lives. [1]

[Marks available 9, maximum 5]

[Total 9]

*Part (i) This was well answered with most candidates getting most of the marks available.*

*Part (ii) The answers to this part varied depending on how candidates structured their answers. Some provided a list of features that impacted mortality rather than the scheme data actually needed.*

## Q5

(i)

Senior Managers and Directors  
Employees (incl. underwriters, admin)  
Claims mediators, e.g. a loss assessor  
Shareholders  
Lawyers  
Regulator/Government/State  
Insurance ombudsman  
Reinsurer  
Third party service providers  
Judges/Courts  
Insurance industry body/e.g. Association of British Insurers.  
Consumer/self-employed (advocacy) groups.

[Marks available 6, maximum 3]

(ii)

Legal position

Primarily the company will need to consider the legal position and how to manage the legal risks.

If the legal position is clear, or becomes clear, then the company should admit liability for the claims.

[2]

Insurance Contract

Contract wording/Ts and Cs will need to be investigated thoroughly and discussed with legal team/advisors. Important to understand the nature of any ambiguity. Specific issues may arise relevant to the new disease e.g. has the government forced a lockdown that prevented businesses from operating or did they make the decision voluntarily (or other relevant example based on new disease).

[3]

Marketing/promotional literature/advertising

The wordings of this marketing/promotional material need to be considered in a similar way to the contract wordings.

[1]

Sales process

Representations made during the sales/marketing process e.g. its sales force/brokers will also be relevant to considering the legal position. Where salespeople are employed, or brokers are owned, by the company, the company will be legally liable for the advice given.

In terms of what has been said verbally during the sales/advice process, it will be

important to understand where the onus of proof lies. A lack of evidence by the insurer about what has been said during the sales process is likely to mean that the policyholder is given the benefit of the doubt. [3½]

Wider legislation or regulation as it applies to the business.  
 Contracts needs to be fair for customers, particularly retail customers. Many countries have consumer protection legislation that provides for unfair terms in insurance contracts to be set aside. There is also legal risk that the terms will be deemed unfair at a later date.  
 The Regulator may have a view which the insurer will need to take into account. The possibility of the regulator challenging these cases on behalf of the policyholders needs to be considered, and additional costs that may arise e.g. fines. [4]

Competition laws  
 There may be anti-competitive agreements and abuse of dominant market position issues that need to be allowed for. [1½]

Court rulings/case law/precedent judgment  
 Potential outcome in a court ruling.  
 Large claims can be particularly susceptible to legal challenge. There is uncertainty over how courts will rule. Depending on the cost of defending legal action, strength of the case, size of the claim and implications from losing the case companies may choose to settle a claim rather than expose themselves to the uncertainty from courts. If larger claims are admitted, difficult not to admit all similar (smaller) claims. If case law/precedent judgment exists, legal risk can still exist as the rulings rarely apply to identical circumstances across companies. One approach may be for the company to take expert/barrister (“counsel’s”) opinion. [7½]  
 The contract is standard, and the disease will impact all insurers offering it. The company may be bound by an industry-level response. [1]

Secondary/Discretionary actions of company  
 Secondly, if the legal position is unclear the company may be considering, in its discretion, whether to admit claims. In this context, the following issues also become relevant. [1]

Potential cost to the insurer from these claims if it accepts the claims from the new disease. Versus available capital/surplus. Consider whether investment liquidity matching is appropriate. Consider the extent to which claims inflation could impact the final claim amount settled given legal considerations will have delayed claims and may result in substantial IBNR. Impact on profitability. [3½]

The ability to claim under reinsurance contracts needs to be considered. The potential level of claims can be very large. The larger the losses an insurer has the greater its willingness to seek ways within legal contracts to increase recoveries. Similarly, a reinsurer will seek ways within legal contracts to reduce claims the larger they are. [1½]

The company will need to consider any commercial pressures. Are other competing insurers impacted by the new disease, if so what is their response been on allowing claims from this new disease? [1]

There will be reputational risks if competitors are admitting claims on their similar policies. New business may be impacted if claims are not admitted, and perhaps not just on this product line. The possibility of upsetting major distribution partners also needs to be considered. [2]

What is the operational impact of accepting or declining these claims? If the claims are accepted how many claims will the servicing department need to process and how quickly. If outsourcing is being used, any impacts on this e.g. will more fees become payable.

[1½]

[Marks available 34, maximum 8]

**[Total 11]**

*Part (i) This was well answered.*

*In Part (ii) candidates that realised that there was big legal risk managed to structure their answers scored well. Candidates that didn't answer in this way tended to have a less structured answer and did not score as well. Candidates that linked the legal risk to the commercial risks of the back of the impact if they did not pay did very well – i.e. must pay if legally have to, but if not legally liable might want to pay for other commercial reasons.*

## Q6

Fair value in accounting terms is the amount that an asset could be exchanged between two knowledgeable, willing parties at arm's length.

[1]

The definition of fair value does not specify how such a value is calculated

[½]

Where there is no liquid secondary market in the asset a fair value needs to be estimated using market-based assumptions and a valuation model (if appropriate) (with example model e.g. discounted cash flow (DCF)). Market risk free rates of discount should be used, with the risk-free rate being based on the term of the cashflows involved.

[2½]

If the asset (or a comparable asset) has been recently traded, then market price could be used adjusted for sector price (index) changes in the interim period, provided no major event has occurred that disrupts future prices (e.g. COVID)

[1½]

Advice could be sought from an independent/expert valuer.

[½]

Fair valuation needs to be consistent with any rules, regulations or accounting standards that need to be complied that required asset fair values.

[1]

(a)

Unlisted corporate bonds

Use corporate bond yields if adjusting recent prices.

[½]

A model would involve discounting coupons and expected redemption proceeds, allowing for credit rating of the issuing company. Use other listed/traded corporate bonds of the same issuer to deduce credit rating.

[2]

A spread or price adjustment is likely to be required to reflect the different liquidity of the asset compared with traded assets.

[½]

(b)

Commercial real estate loans (CREs)

Commercial real estate loans are rarely listed and actively traded so there are unlikely to be the relevant secondary market pricing information available.

[½]

There are two approaches that could be used:

Firstly, for the issuer may have primary market pricing information available for similar recently issued CRE loans of the same company

[1]

A price adjustment may be required to reflect differences between the reference primary market new issue loans and the loan being priced. . [½]

A valuation model could be used to discount expected repayments due under the loans. . [½]

A spread or price adjustment would be required to reflect the different liquidity of the asset compared with traded assets. . [½]

Could take advice from a commercial mortgages broker. . [½]

(c)

Property

Could discount future market rents that the property could attract, using fair value based parameters from recent property transactions, taking into account property type, location, property quality, tenant quality, trading conditions etc. [1½]

The property value may need further adjustment for the following factors:

Downward adjustment where the property needs to be sold within a certain time frame. [½]

Whether the property is vacant, requires development, etc. [½]

Could take advice from a surveyor/property valuer. [½]

(d)

Defaulted loans made to and secured on infrastructure assets

Fair valuing loans that have defaulted requires the individual loan to be quantitatively and qualitatively assessed. [½]

The fair value of the loans should take into account whether the loan is planned to be sold or continued to be held. [1]

Defaulted investments can have large direct costs associated with obtaining recoveries. If a loan is planned to be sold, then the price will need to reflect the likely proceeds from a sale and a buyer would allow for such costs in the price paid. For a firm working out the loan themselves they may separate the value of recoveries from the direct costs associated with obtaining recoveries. [1½]

For a newly defaulted non-traded infrastructure loan it is necessary to assess, the best estimate and range of likely ultimate recoveries gross and net of direct expenses, the time to recovery, risk, uncertainty and time value of money. This information will be used to determine a fair value. [1½]

For older loans, fair values will depend on material developments since the previous fair value to determine whether a revaluation is required. Given the risk and uncertainty during a default recovery process a material adverse development would be reflected in a further reduction in price, however, an increase in price is less likely. [1½]

As loan is secured, could make some look through to the value of the underlying infrastructure asset(s), discount the specific expected cashflows involved e.g. toll road charges. [1½]

[Marks available 24, maximum 12]

*Most candidates did well with (a) and (b) and found (c) and (d) challenging.*

Q7

First, the actuary could consider how material/sensitive is the pricing to that particular assumption. Sensitivity runs of a pricing model may conclude that the assumption is not important to the pricing of the new product. Then some reasonable value could be assigned to that assumption without further work. [2½]

If the assumption is material/sensitive, then more work is required. Rather than set what will be a very uncertain assumption, the actuary could try to work with the client to make it less sensitive e.g. could the product be redesigned to reduce the sensitivity, e.g. exclusions. Very large margins could be built in. The competitiveness of the product may however mitigate against such actions. [2½]

Could add margin directly onto the best estimate assumption itself or allow for by increasing the risk discount rate, or by increasing the overall price. [1½]

If the product design to be launched has profits which are sensitive to the assumption, then further work will be needed to attempt to set a value for the pricing assumption. At this stage, understanding the nature of the uncertainty will help to guide the further work. How much is understood about the factors driving future experience. [1]

Product is new so may lack relevant past data, or enough volumes/credibility. [1½]  
Use past data as much as possible but consider the conditions that will apply in the future period to which the projections will relate and how those conditions will lead to differences from the past data that is being used. This requires judgment. Analysis of fluctuations and trends will be important. [3]

Any other sources of data should be sought in addition e.g. reinsurer, market, particularly relating to any similar product offered by reinsurer/market. Also, national statistics, overseas, government forecasts (if any, with example). Interconsistency of the pricing basis assumptions will also be important. Past data can also be used to help project future changes. [5]

Ideally the past data would be split into homogeneous groups, subject to credibility. [1]  
Will need to allow for potential errors, changes in format or definition of data over time. [1]  
Consider any legislative or regulatory constraints, as well as professional/technical guidance. [1½]

Overall the needs of the client need to be considered. The actuary should not misrepresent the high uncertainty of a particular assumption. Rather than a point estimate of the assumption, a range of assumptions might need to be presented in the deterministic modelling. This will almost certainly be needed if the available data is very poor. Or the actuary may need to recommend a stochastic approach be used instead, where not just the mean assumption will need to be estimated, but also the shape of the distribution and its variance. [4]

Given the uncertainty, the assumption will need to be kept under frequent/close review. [½]

[Marks available 25, maximum 13]

*This was reasonably well answered though with variation between candidates. Responses structured around the Actuarial Control Cycle generally scored well, although this sometimes restricted wider thinking. With so many marks available more was expected on data issues, especially with this being a new financial product. It was not expected for candidates to postulate the specific assumption needed and those candidates that did this did not answer the question in enough depth to score well.*

**Q8**

(i)

- There may now be a lack of profitability or risk appetite on the part of the companies. [1]  
 There may now be a lack of demand for the products. [1]  
 Reinsurance may no longer be available, or it may now cost too much. [½]  
 It is likely that the premiums that would now need to be charged are more than potential policyholders are willing/able to pay. [1]

This could be for many reasons:

- New regulations. [1]  
 The capital needed to cover this risk may have increased. [½]  
 It may no longer be compulsory to offer this product. [½]  
 The cost of care and/or the time living in a care home may have increased substantially, e.g. Covid. These may also be expected to increase in future. [2]  
 There may be adverse selection meaning that those taking out these policies will cost much more than the insurance companies initially assumed. [½]  
 Due to the uncertainty substantial contingency margins may be needed making the premiums too high. [1]  
 The expenses relating to these policies may be much higher than expected. Lower new business levels could cause increase in per policy expenses. [1]  
 Investment income may be much lower. [½]  
 There may have previously been tax advantages for policyholders taking out these policies which have been reduced or removed. [½]  
 The policies may have been difficult to understand. This may have led to mis-selling issues. There may have also been reputation issues particularly as the policyholders were elderly. [1½]  
 Also, it may be more difficult and expensive to sell products to the elderly. [½]  
 Alternatively, the government of Country A may be now offering free or subsidised nursing care reducing the need for these products. [½]  
 More people may be being cared for by family or friends/cultural shifts. [½]  
 Better/cheaper alternative product types now available. [½]

[Marks available 14½, maximum 5]

(ii)

- Care insurance policies providing cash (i.e. non-indemnity) benefits may be available. [½]  
 Could save in advance to give a lump sum to be used for future care-home needs or have investments and private income available (with example). [1]  
 Could sell home (if owned) and use the sum raised towards nursing-home care. [½]

Could claim on a critical illness policy or exercise drawdown from a life insurance policy that allows this.	[½]
Individuals could purchase an annuity at the point they need care. This annuity would need to increase with inflation (ideally that relevant to nursing home care).	[1½]
If purchasing at point of needing care, may be able to purchase an impaired life annuity.	[½]
Could use equity release on own home. This could provide a lump sum or regular payments which could be used for care-home costs. This would be likely to be useful if another individual (partner or adult child) was still living in the property.	[1½]
Could rent out home to provide an income to pay for care home costs.	[½]
Family may be able to provide the funds needed.	[½]
State/charities may offer support.	[½]
[Marks available 7½, maximum 3]	

(iii)

If purchasing cash insurance, saving in advance, or selling home, or using drawdown there is a risk of not enough money being available. There is a risk that capital will run out while still in the care-home. Key risks are investment risk, longevity risk and care-home cost inflation risk. Using a critical illness policy runs the risk that one may need nursing home care for health condition(s) not covered under the policy. [2½]

With the annuities, there will no longer be longevity risk but there will be the risk that any increases chosen (inflation or a fixed percentage) do not keep up with the rises in the nursing-home costs. There will also be mortality risk as dying in the very short term may appear to be poor value for money. There may be a low market annuity rate at time of purchase. [2]

Annuity and cash insurance are exposed to risk that the provider becomes insolvent. Also insurer risk/profit margins mean the risk of insufficient benefits is increased [1]

There will still be property expense risks with equity release and the amount released may not be sufficient to pay for the care needed. If regular payments are being made these may not increase at the same rate as the care home costs. [1½]

If renting out property, there will be property expense risks, void risks and the risk that the rental payments do not rise in line with care home costs. [1½]

If family have committed to paying for care home costs, there is the risk that their personal or financial circumstances could change and so this may no longer be possible. Similarly State/Charity provision is subject to change (with example). [1½]

[Marks available 10, maximum 6]

**[Total 14]**

*Part (i) was answered well by candidates.*

*Part (ii) Most candidates scored reasonably well on this part, but candidates did not give enough breadth to score full marks.*

*In Part (iii) only well prepared candidates candidates scored more than half marks. This was due to lack of depth in candidates answers with insufficient distinct points being made.*

**Q9**

(i)

From point of view of credit unions

Pooling many risks together means that there should be greater certainty in future payments. May enable better terms to be offered to members taking out the loans. [2]

The risk for the credit union will be default on its loans. [1]

Ideally the risk events should be independent of each other. This should be the case for default as it is likely to depend on the circumstances of the individuals taking out the loans. [1]

The probability of the event should be relatively small. The probability of default should be relatively small if the credit union has carried out reasonable checks before issuing the loan. [1]

Large numbers of potentially similar risks should be pooled together. This will apply as all the risks should be broadly similar. [1]

There should be an ultimate limit on the liability. This will be the full value of the loan issued. [1]

Moral hazards should be eliminated. This should be the case as the credit union may have loyalty from its members. [½]

There should be sufficient data to be able to estimate the default risk. This may be more difficult initially but for an established credit union this should not be an issue. [1]

From point of view of members

Pooling may make it easier to obtain a loan (than via commercial route) and possibly cheaper. [1]

[Marks available 9½, maximum 3]

(ii)

The credit union could avoid the risk. They could refuse to give loans where the risk is very high. Possibly for those with a poor history of repayment. [1]

Could reduce the risk. This would be done through limiting the amount of the loan; either the absolute amount of the loan or the loan offered compared to salary. A guarantee could also be asked for. [1½]

Transfer all or part of the risk. Could take out insurance against default. This could cover a percentage of any loans outstanding. They could securitise some of the loans. [1½]

Retain the risk. This will be reasonable if there has been good underwriting before

taking on the risk and the risk is well managed.	[1]
Can manage the risk. Can consider diversification but would be limited as members all live in the same city and so would be likely to be impacted by any economic shocks or natural disasters similarly.	[1]
Underwriting at issue (with example) would be important and would ensure that the risks taken on were within the credit union's risk appetite.	[1½]
Management control systems can also be used.	[½]
Will need to hold good quality data on loans issued.	[½]
Accounting and auditing will enable proper provisions to be established and ensure that regular loan repayments are collected.	[1]
Loans outstanding will need to be monitored. This should ensure that any issues with repayment are identified at an early stage.	[1]
Can send regular reminders for loan repayments due to ensure members do not get behind with their payments. If they do get behind, can get in touch as soon as possible to arrange for payment holidays or reduced monthly repayments over a longer period.	[1½]
A pastoral approach is likely to be in place (with example).	[1]
	[Marks available 13½, maximum 5]

(iii)

The exceptional circumstances may mean that some members have financial problems and are in need of emergency loans in the short term (with example). The credit union may feel it has an obligation to help its members (pastoral) or part of stated aims of the union. To be in line with other credit unions, or to distinguish themselves from others. May want to retain/grow membership. May have plenty of capital available.	[3]
Having no assessment will mean that the loans can be given more quickly which the members may need. This may also reduce the administration costs.	[1]
The maximum amount allowed will mean that higher loan amounts will still need to be assessed which should limit the defaults.	[1]
The fixed time period for application should limit the number of loans which could be applied for.	[½]
The history of repayment for these loans may have previously been good so the credit union assumes that this may also be the case for these loans too and are confident of eventual repayment.	[1]
There may be a sense of loyalty towards the credit union as it is for members in one city and this may increase the likelihood of repayment.	[½]
The exceptional circumstances may not affect all members so the credit union will not be expecting all members to apply for these loans.	[1]
	[Marks available 8, maximum 4]

(iv)

The main problems will be that more members apply for the loans than anticipated. Possibility of fraudulent applications. There may be more defaults than allowed for.	[1½]
There may be more defaults than expected as the exceptional circumstances may not be as temporary as expected. And it may even be more of a problem in this city than in others.	[1]
Also, if many more people apply than expected it may be very difficult to approve the loans as quickly as needed.	[½]
May cause liquidity/investment matching problems.	[½]
Reputational issues may arise e.g. the offer is not properly communicated to whole membership.	[1]

[Marks available 4½, maximum 2]

(v)

To reduce numbers applying. fraud, could check that the people applying are affected by the exceptional circumstances, to discourage others applying. Do not allow members to apply if they join after the emergency loans are announced. [1]

To mitigate defaults, may charge a higher rate of interest although this may lead to bad publicity in the circumstances and may lead to higher risk individuals applying. [1½]

May need to accept the situation and raise more capital to cover these loans. [½]

Will need to monitor the situation and take early action if possible. Could extend the length of the loans and/or provide payment holidays. [1½]

Insurance could also be useful particularly relating to the circumstances where a high proportion of members are unable to repay their loans. [½]

For speeding up loan approvals, difficult to change systems in such a short space of time but it may be possible to hire or redeploy staff. [1]

Keep some funds in liquid form. [½]

Ensure proper communication/advertising to all the members. Ensure time period for applying is neither too short nor too long. [1]

[Marks available 7½, maximum 3]

(vi)

If the members had a common profession rather than living in a common area the same problems would apply but may be more or less severe. [½]

If the exceptional circumstances affected some professions more than others, then it is possible that a very high proportion of members would apply for the loan. The credit union may not be able to offer this many loans. Particularly as savings may also be reduced for the same reason. In a particular city it is less likely that so many individuals would be affected. [2½]

Similar issues would apply to default on these loans. [½]

It may not be realistic to offer such loans in these circumstances. [½]

Alternatively, if the profession was less affected by the exceptional circumstances than most then fewer would apply for these loans and there should be fewer defaulting. [1]

Much is likely to depend on the average salary for the profession. Will likely be a more concentrated salary band compared with members living in a same city. [1]

It is possible that the exceptional circumstances affect some parts of the country more than others. In this case having members with a common profession should mean they are more likely to be in different parts of the country and so this could offer diversification and be a less risky proposition. [2]

[Marks available 8, maximum 4]

**[Total 21]**

*Part (i) This was answered well by candidates.*

*In Part (ii) candidates that focused on ways of managing the risk got higher marks.*

*In Part (iii) candidates going into sufficient depth on their points scored full marks.*

*Part (iv) This part was answered very well.*

*In Part (vi) only well prepared candidates thinking widely enough to score the marks on offer.*

**[Paper Total 100]**

**END OF EXAMINERS' REPORT**