EXAMINERS' REPORT

November 2021 examinations

Subject F103 — *General Insurance*
Fellowship Principles

INTRODUCTION

The attached report has been prepared by the subject's Principle Examiner. General comments are provided on the performance of candidates on each question. The solutions provided are an indication of the points sought by the examiners, and should not be taken as model solutions.

QUESTION 1

i. Second surplus treaty:

- This would only be used if risks were expected to regularly exceed the capacity of the first surplus treaty.
- The second treaty would be taken out with a different reinsurer.
- It could also be argued that the second treaty could thus be used to provide some diversification by reinsurer.
- The second surplus acts concurrently with the first surplus for those risks that involve both treaties.
- The size of line used under each treaty will be the same, both being based on the cedant's retention limit.
- The usual practice would be to use the whole of the first surplus capacity for a risk, before placing the balance on the second surplus treaty.
- Some treaties may require this, but in other cases the treaty may stipulate that at least as much risk would have to be placed to the first surplus treaty as to the second, to avoid selection against the second surplus reinsurer.

ii. Relative experience of direct writer and surplus reinsurer:

- For any given risk the direct writer and reinsurer will have the same (proportional) claims experience, as all claims are shared in the proportion agreed at outset for that risk.
- However, for the portfolio as a whole, their claims experience would not be expected to be the same.
  - Not all of the policies written will reach the surplus retention limit, and so will not be reinsured, and thus they will not share the same portfolio of risks.
  - Of those policies that are reinsured, different proportions of each could be reinsured.

iii. (a) Recovery = 0.25 × \$12m = \$3m

(b) Retention = \$50m (maximum)
Proportion to B (of what is left after A)
= (0.75 × 100m – 50m) / (0.75 × 100m) = 1/3
Hence recovery = 0.75 × 1/3 × 12m = \$3m

(c) Balance of claim after A&B = \$12m – \$3m – \$3m = \$6m
Hence recovery = \$4m.

(d) All 4 lines need to be used to keep the minimum retention
This results in a retention of 0.75 × 120 / 5 = \$18m, which exceeds the minimum limit of \$10m
Proportion to B (of what is left after A) = 4/5
Hence recovery = 0.75 × 4/5 × 40m = \$24m

(e) Balance of claim after A&B = \$40m – \$10m – \$24m = \$6m
Hence recovery = \$4m.

(f) Since the recovery from C is only \$1m we know that the balance of the claim after A&B cannot have exceeded the upper limit on the XL cover (\$6m).
Hence X is left (after recoveries from A, B & C) with \$2m (the excess point for the XL cover).
Thus we have:

(f) = 0.25(f) + \$(9+1+2)m
0.75(f) = \$12m, and thus
(f) = \$16m.

Part (i), despite being bookwork, was poorly answered. Many candidates appeared to ignore the fact that the question was asking about a second surplus "treaty" and not just facultative surplus cover for an individual risk.

Part (ii), standard bookwork, was reasonably well answered.

In part (iii) candidates often provided too little explanation. It is not sufficient to simply come up with the correct answer, it is necessary to show how this was determined. Some lost marks for careless mistakes such as omitting currency and units.

QUESTION 2

i. Insurance risk is the risk of loss arising from the inherent uncertainties about the occurrence, amount and timing of insurance liabilities, expenses and premiums.

It is normally divided into:

- Underwriting risk, relating to risks yet to be written or earned; and
- Reserving risk, relating to risks already earned.

ii. Methods of capital allocation:

- Percentile method:

The percentile method is applied to the output of a stochastic model. We would take the simulation which determines the capital requirement and assess how the loss in that simulation was made up. That is, we would look at the underwriting result in each line of business for that simulation.

When allocating capital, \we may use a different risk measure or a lower percentile from that used in assessing the capital requirement.

Disadvantage: The capital allocation will be unstable if based on a single simulation. In practice this can be overcome by using a number of simulations, however there is some subjectivity in the choice of this number

- Marginal capital method:

  Also known as the "last in" method. Here we allocate with reference to the marginal capital requirements of each segment. That is, we consider the additional capital that would need to be held if the element was to be added to the business.

  Disadvantage: This method will allocate a different level of capital to different classes of business or product depending on the order in which capital is allocated to the different classes/products/lines.

- Shapely method:

  This is an extension to the marginal capital method based on game theory. We allocate the capital with reference to an average of the marginal capital requirements, assuming that the class/line under consideration is added to the overall portfolio first, second, third, and so on. We then take the actual capital requirement as the average of these amounts.

  The advantage of this method is that the allocated capital is not dependent on the order in which it is allocated to each class.
  Disadvantage: It may be unworkable in practice if there are too many classes.

- Proportions method:

  We may allocate economic capital to each class of business in proportion to its contribution to the risk metric on a stand-alone basis. We would first need to calculate the required capital separately for each line of business, and then work out what proportion each of these is of the total of the individual capital requirements. We then calculate the aggregate capital requirement, allowing for any diversification benefits, and allocate this to each class/line according to the calculated proportions.

  Disadvantage: The proportions method may be too simplistic and may not provide a true reflection of post-diversification capital requirements by class.

This was a bookwork question, yet surprisingly few candidates did well. Most candidates knew the method names, but often fell short in explaining how they worked.

QUESTION 3

i. The ID number will provide the following rating factors:

- Age
- Gender
- Years of driving experience (assuming people get license at age 18)
- South African Citizen or permanent resident

If the ID number can be linked to home affairs one could also obtain marital status and to get the credit score for an individual.

The excess, car hire and start date will define the coverage and exposure. Excess can also be used as a rating factor by itself.

Car registration number will provide

- Type of car
- Age of car
- Value of car
- Whether vehicle is financed or not

ii. When pricing, it is important that we monitor the progress of existing experience as it develops, to assess the need for a review. Thus, one effect of inadequate data is that we might make a wrong decision on the rate to be charged.

When we carry out the actual projections of the new rating requirements, inadequate data may distort the calculations. This may be due to errors in:

- Apparent size of the business in force, and its value expressed in exposure units and premium.
- The apparent claims experienced and its trends, on which the projected future costs are being based.

Moreover, the errors may distort the true distribution of the business between risk groups. This could have consequences if we decided to adopt a differential rating increase for each risk group. It could also affect the marketing strategy if certain risk groups appeared to be more attractive risks than they were.

If we adopt a deficient set of rates because of faulty data, the insurer might:

- Suffer underwriting losses if rates are too low.
- Suffer loss of market share if rates are too high.
- Attract undesirable risks, causing deterioration in underwriting experience if rates for such risks are too low (anti-selection).

iii. The insurer will need to look at both external and internal data sources but would need to ensure that it can create a link between those data sources and the potential policy holders taking out the policy.

Internal data:

- If the company has already sold other insurance products to the individual, one would potentially be able to link to any previous rating factors or obtain information from other underwriting questionnaires or internal databases.

External data:

- Reinsurer's data
  - Could request technical advice from reinsurers to ensure that the risk premium rates charged are correct or help with other adjustments based on the rating factors collected.

- Industry data
  - Identify if there is any additional information from industry that can be used.
- Relevant organizations or government bodies
  - The insurer could see if it can obtain data from government organizations regarding traffic fines and infringements related to the insured.

Use of technology:

- The insurer can see if it can use technology to collect and analyze data from social media accounts, credit data or any other loyalty programmes it might be part of.

Continuous underwriting:

- The insurer could install a telematics device that would automatically provide real-time data on the car that can then be used to update pricing with regular renewals.
- The insurer could request additional data from the policyholder to finalize rating factors.

Candidates generally performed well on this question.

In part (i) many candidates wasted time providing unnecessary detail.

In part (ii) a number of candidates went off topic and discussed the impact on reserving, capital requirements, investment strategy and reinsurance and therefore wasted time, as the question specifically asked for the impact on pricing.

In part (iii) a number of candidates did not answer the question, and discussed other rating factors or went into detail explaining why data sources were not appropriate.

QUESTION 4

i. Why premium rate is a key factor:

- The premium rate is a measurement of how profitable a policy or group of policies is expected to be.
- If premium rates and business volumes are high enough, the insurance company should make a profit.

Example of how this can be used:

- Comparing loss ratios between successive periods, if the premium rate has decreased, it is expected that the loss ratio would increase correspondingly.
- This is not due to higher claims being experienced but merely due to lower premiums being charged.
- If the insurer wasn't aware of the change in premium rates, they may have incorrectly assumed that claims experience was getting worse.

ii. Premium rate change (t1-t2) = Premium rate (t2) / Premium rate (t1) -1

Year	Premium Rate	Loss Ratio	Prem rate change
2020	5.0%	77%	-9.1%
2019	5.5%	70%	-8.3%
2018	6.0%	65%	3.4%
2017	5.8%	55%	-3.3%
2016	6.0%	50%	

- Most years experienced negative premium rate changes, except the 2017-2018 year.
- There was a significant increase in the loss ratio in 2018, which is driven by a worsening in the claims experience as premiums improved.
- The worsening in the Loss ratio for each other year is a combination of premiums deteriorating and claims deteriorating, this can be seen by expressing premium rates as an index:

Year	Prem rate change	Premium	Claims
2020	-9.1%	83.3	62.5
2019	-8.3%	91.7	59.6
2018	3.4%	100.0	60.0
2017	-3.3%	96.7	50.3
2016	Base	100.0	50.0

- For example in the 2020 year, premium rates have deteriorated but this does not account for the full loss ratio deterioration, claims have also increased.

This question was very poorly answered by almost all candidates. The question required higher-order thinking, which was lacking in most answers. Generally answers did not have sufficient depth, particularly on part (ii), in order to gain more than the few marks awarded for the most obvious observations. Most candidates ignored the part of the instruction in (ii) which said "based on the information provided above" and gave generic answers.

QUESTION 5

i. Risks faced and appropriate insurance products

Damage to space rockets:

- There is a risk that the space rockets suffer damage and hence result in either total loss or repairs being required. This could arise from human error or natural catastrophes (e.g. asteroid hitting a space rocket).
- Space rocket property damage insurance could be purchased.

Damage to goods in transit:

- There is a risk that the goods (materials used for building the base) suffers damage in transit to Mars. Similar to the case above, this could arise from human error or natural catastrophes (e.g. asteroid hitting a space rocket).
- Goods in transit insurance could be purchased.

Bodily injury, disease or death of employees:

- There is a risk that the employees of ISA suffer bodily injury, disease or death owing to negligence of the employer to provide safe working conditions, especially in light of the uncertainties of such an expedition.
- Employer's liability insurance could be purchased.

Damage to base on Mars:

- There is a risk that the base suffers damage and hence results in either total loss or repairs being required.
- Commercial buildings property damage insurance could be purchased.

Damage to contents:

- There is a risk that the moveable property of the base suffers damage from a range of perils, for example natural catastrophes present on Mars.
- Contents insurance could be purchased.

Third party damage caused by the space rocket:

- There is a risk that the space rockets departing Earth fail to launch successfully and either explode or fall back to Earth causing damage to third party property or bodily injury to third parties.
- Space rocket third party insurance could be purchased.

Environmental damage:

- Given the significant number of trips needed to and from Mars to transport materials, there is a risk that this venture could cause pollution. The damage arising from said pollution may need to be compensated for.
- Environmental liability insurance could be purchased.

For each of the above, Legal Expense insurance could also have been purchased, where the policy will pay any legal expenses as a result of legal proceedings being initiated against ISA, or ISA needing to initiate legal action against another party.

ii. Key insurance product that Alon Tusk Enterprises should purchase

Product Liability:
This insurance product indemnifies Alon Tusk against the legal liability for the death of or bodily injury to a third party (employees of ISA or other individuals), or for damage to property belonging to a third party that results from a fault with the space rocket.

The policy will also usually cover legal costs.

iii. Accumulation risk mitigations:

- Monitor aggregations of risk that may be present by geography (for example if the materials to build the base are stored in a single location prior to being loaded onto the space rocket. The insurer could encourage ISA to support sound risk management by reducing geographical accumulations.
- Purchase reinsurance that protects against aggregate events. Examples include Catastrophe excess of loss or Stop loss reinsurance structures.
- Consider amending terms, conditions and exclusions e.g. reducing policy limits for certain events.
- Increase diversification by writing more classes, or new geographical areas outside of that where ISA is launching the project from.
- The insurer may need to increase rates significantly if accumulations remain persistently high.

Candidates generally performed well in part (i), with many risks and products being identified. There were, however, many responses that were either not specific to the question or incorrect products for the identified risk were recommended.

Candidates did not perform well in part (ii).

There were mixed responses for part (iii), with few candidates scoring full marks.

QUESTION 6

i. a. A claims made policy covers all claims reported to an insurer within the policy period irrespective of when the incident occurred. Even if the claim event happened while the insurance policy was not active, it will still be paid if the policy is in force when the claim is reported.

b. A losses occurring policy provides cover for losses occurring in the defined period no matter when they are reported. Cover is provided if the loss occurs while the insurance policy is active.

ii. a. Claims made.
b. Losses occurring.
c. Claims made.
d. Losses occurring.

iii. Possible problems:

- When the transition moves policies from a losses occurring basis to a claims made one, many of the losses that are reported will still be covered under the old, losses occurring policies.
- Claims that occurred under the old policies will need to be excluded from the new. In classes and jurisdictions more prone to latent claims this need for exclusion will last for a long time.
- This means that early claims made policies will have significant exclusions, and will be subject to substantial discounts on premium that will need to be withdrawn over time.
- This could mean that the total income for the Employers' liability policies of Gensure will be depressed, with implications for expense loadings and commission rates as well.
- There may be loss of business to Gensure if the entire market remains on a losses occurring basis while Gensure changes to a claims made basis with significant exclusions. May be negatively perceived by the public.
- Claims made policies will not provide cover for any losses reported after the expiry date. This will create a need for run-off policies.
- For example, where employees may still develop industrial diseases from prolonged exposure long after actual exposure to the harmful substance, cover will still be needed. Policies will need to be developed to meet this need.
- Problems are created for pricing and reserving. In particular as the development period is much shorter for claims made than for losses occurring policies.
- There may also be problems with outwards reinsurance e.g. ensuring there are no gaps.

- Policyholder communication will be required e.g. to ensure they know what their coverage is and to provide policyholder protection e.g. to ensure that no lawsuits are brought in the future.

Overall candidates performed well across this question. Many candidates scored full marks in the bookwork components of this question, being parts (i) and (ii).

There was a wide range of responses to part (iii), with very few candidates understanding the full extent of the problem of moving from a losses occurring basis to a claims made one.

QUESTION 7

i. Mortgage indemnity cover:

- This insurance covers the lender against the risk of the borrower defaulting and the value of the property on which the loan is secured is not sufficient to repay the loan.
- Perils are not specified – non-payment for any reason is covered.
- Claim payments (the amounts of outstanding loans which the lender is unable to recover by selling the houses) are usually lump sums.

Unusual features:

- The term of the cover will be much longer than the usual 1 year, depending on the mortgage term (which could be as long as 30 years), funded by a single premium.
- The policy is of no direct benefit to the premium payer (mortgage holder) as the beneficiary is the lender.
- The risk of claims (and accumulations) is very closely linked to the economic cycle, interest rates and employment levels.
- The risk should reduce over time as the difference between the home value and lower outstanding loan increases (however might not, depending on economic circumstances).

ii. Calculations:

UPR* (31/12/19)	DAC (31/12/19)	UPR (31/12/20)	DAC (31/12/20)
(25-7/12)/25×21000 =R20510	(25-7/12)/25×2000 =1953.33	(25-19/12)/25×21000 =R19670	(25-19/12)/25×2000 =1873.33

** UPR (net of DAC) was also given credit.*

iii. Suitability of assumptions:

- Mortgage indemnity risk is not uniform over policy term:
  - The claim amount is the difference between the realisable home value and the outstanding loan (if higher), however house prices should increase over time and the outstanding loan should reduce as it is being paid off, so the likelihood of a claim, and the claim amount, should reduce over time.

- Economic conditions and business cycles may lead to periods of higher risk and periods of lower risk:
  - Economic stagnation/recession may lead to higher unemployment levels (increasing the likelihood of loan default) and lower house prices (potentially increasing claim amounts).
- The assumption of acquisition costs being uniformly spread may be reasonable:
  - Commission and other initial costs are paid upfront and could be viewed as being incurred evenly of the policy term – commission refunds are likely to be based on the proportion of policy term outstanding at policy cancellation.
  - Some initial costs (e.g. initial underwriting and admin) may be viewed as being earned upfront on the sale of the policy.

iv. Suitability of investments:

- The insurer's investment strategy should aim to match the liabilities as closely as possible; the extent to which an unmatched position can be adopted will depend on the insurer's solvency position and risk tolerance.
- The characteristics of the liabilities include:
  - Term:
    - Unexpired risks/UPR could be very long based on the policy term (up to 30 years), however risk should reduce over policy term so liability duration should be shorter (but still extending many years).
    - Outstanding claims (once reported) are likely to be very short if the lender can demonstrate the loss suffered on selling a repossessed home.
    - IBNR claims may extend several months/years depending on the period of time needed by the lender to repossess and sell a home.
  - Currency: the liabilities are likely to be in local currency.
  - Nature:
    - Unexpired risks/UPR nature cannot easily be identified as inflation-linked or 'nominal'.
    - Outstanding claims have an inflation-linked (interest-rate linked) component (the outstanding loan which continues to grow until settled) and a fixed component (the realised value for the repossessed home); overall could be considered as loosely inflation-linked.
    - IBNR claims have an inflation-linked component (the outstanding loan which continues to grow until settled) and an unknown realisable value for the repossessed property (which might reduce significantly in order to achieve a sale); overall cannot easily be identified as inflation-linked/'real' or 'nominal'.
    - The insurer's expenses (e.g. wages) are inflation-linked.
- The rationale for holding money market instruments (cash) may be suitable:
  - Cash earns a return linked to the rate of interest charged on outstanding loans;
    - The outstanding loan is a key component on the liability, if this grows more quickly due to increasing interest rates, cash should also benefit from increasing interest rates.

        - However during economic recession (when loan defaults and potential claim amounts are increasing due to falling house prices) inflation-linked returns on cash will be low (interest rates are likely to be low then as the central bank may be aiming to stimulate economic growth).
    - It offers stable capital values, which is particularly important during economic recession when assets are needed to pay for worsening claims experience and other asset classes may experience negative returns.
    - If future new business premiums cannot be relied upon to meet outgo, the investment strategy may require more cash.
    - Cash offers a high level of liquidity to meet claims outgo when needed.
- Cash may be suitable if the insurer's solvency position is weak.

v. Comment on the suggestion of using an ALM:

- An ALM could assist with the formulation and quantitative investigation of the insurer's objectives, in particular examining the trade-off between maximising returns and ensuring solvency taking into account the insurer's risk tolerance and solvency.
- An ALM explicitly models the interaction between assets and liabilities, which for this class is particularly important.
    - A deterministic ALM will allow the investigation of specific scenarios of interest (e.g. recessions), however requires the user to input specific assumptions and does not provide probabilities for outcomes.
    - A stochastic ALM does not permit the investigation of specific scenarios.
    - However, in producing probability distributions for outcomes it is able to generate scenarios not planned for by the user.
- An ALM requires considerable expertise and expense, however this could be justified by its uses and information it produces.
    - It may confirm that cash is the most suitable asset class for this business, or it may suggest another strategy is better at meeting all (or a higher number) of the insurer's objectives.

Overall this question was not answered well. Part (i) was bookwork, and it was disappointing to see this part not answered well. Many candidates confused mortgage indemnity with creditor insurance.

In part (ii) a large number of candidates did not get this simple calculation correct. Many did not read the question properly and assumed policy inception 1 July 2019.

In part (iii) most candidates appreciated that risk is unlikely to be even, however it was clear that most did not understand the issues involving initial expenses and DAC.

Part (iv) was a challenging question requiring careful thought and application of bookwork. Most candidates seemed very uncomfortable with this part, producing long rambling answers that did not address the specific characteristics of this product.

Part (v) was reasonably well answered.

QUESTION 8

i. Factors that will need to be taken into account to determine the BI benefit payable:

- The impact on turn-over, which will reduce significantly and in some cases will be non-existent. This will depend on the sector e.g. tourist sector versus essential services. The extent of any seasonal variations or growth/shrinkage of the business will also need to be considered when determining turn-over.
- The indemnity period stated in the policy. This will determine the number of days of lost profit covered under the policy.
- The proportion of fixed versus variable expenses incurred by the business. Expenses saved due to not operating the business, e.g. temporary staff can't be claimed for, however fixed expenses e.g. rent or permanent staff will be covered.
- Policy limits and excess.
- Additional costs arising due to the pandemic e.g. hand sanitisers, fumigation would generally be covered.
- Overly optimistic assumptions made by the policy holder who may tend to overstate projected revenue to maximise their claim.
- Policy holders' reasonable expectations given that certain assumptions needed will be subjective.
- Forecasted revenue and profit over the indemnity period.
- Adjustments required for any trends or events that may impact turnover in the absence of lockdown.
- Whether partial payments will be made while the claim is being fully assessed or if the full loss will be paid as a lump sum.
- Consider past profitability as per the income statements.
- Inflation assumptions used to project revenue, costs, etc.
- The date of lockdown.
- The cost of expired stock.
- Decisions from recent court judgements.

ii. Bottom-up reserving:

- Examine each individual policy to determine which policies are exposed to the loss event by identifying factors such as exclusions, location and perils covered, etc.
- An underwriter or claims staff will usually decide whether the policy is exposed to the loss event. If so then a claims expert or loss adjustor will determine a possible loss based on the policy terms, excesses and limits.
- The reserves for all individual policies are aggregated to determine the total reserves for the insurer.
- This method is more time consuming, though potentially more accurate, than the top-down approach.

Top-down reserving:

- The total market loss is attributed to the insurer or individual policy based on the insurer's policy terms, excesses and limits. If less than 100% of the risk is written then the loss is netted down to reflect only the portion on risk.
- The reserves are the sum of the individual portions of each portion of the risk insured by the insurer.
- At the early stages when there is little information available the insurer can estimate its loss as the product of the market loss with its market share.

iii. Determining BI net of reinsurance claims reserves:

Validate the data:

- Checks should be done to ensure that the data received is accurate and complete.
  - This can be done by reconciling the data to an independent source e.g. management accounts. Spot checks could also be done by comparing the excess and limits in the data to policy wordings.

Determine the gross claims reserves:

- For each policy determine if a BI claim is possible by determining whether:
  - The policy includes BI cover.
  - An infected case was reported at the date of lockdown, within a 50 km radius of the insured, while the BI cover was active up to 1 May 2020.
- For all policies identified above determine the BI insurance benefit with the aid of the loss adjustor.
- The gross claims reserve is the sum of the BI insurance benefits for all policies identified above less any claims paid until 30 June 2020.
- Include an allowance for claims handling expenses.

Allow for reinsurance:

- Given the uncertainty in how reinsurers will respond and the uncertainty in how claims will be aggregated for a reinsurance recovery, a scenario-based approach is necessary to determine the expected reinsurance recoveries.
- Use expert judgement and any qualitative information e.g. market views, discussions with reinsurers to assign probabilities to each Cat XL reinsurer responding to the BI catastrophe claim.
- Select various aggregation proportions i.e. the proportion of gross claims that will be recovered from the reinsurers, taking into account hours clauses etc., and assign probabilities to each based on expert judgement.
- Multiply the above probabilities by each selected aggregation proportion to determine the proportion of the BI claim expected to be recovered.
- Include an allowance for possible reinsurer default.
- Decide on the date of the claim submitted in order to apply the 7-day hours clause.

iv. Objectives communicating uncertainty :

- Ensure that the Board has a high level understanding of the methodology used to set the BI reserves i.e. what has been allowed for and excluded.
- Ensure that the Board understands the level of uncertainty inherent in the reserves e.g. whether reinsures will respond.
- Show a range of outcomes to demonstrate the level of uncertainty
- Emphasise the bigger issues e.g. impact on reinsurance renewals, dividends etc.
- Emphasise any unusual/uncertain issues e.g. reinsurance aggregation, lack of historical data necessary to set reserves.
- Avoid any misunderstandings.
- Explain terms that may not be understood by the audience.
- Propose ways to mitigate the level of uncertainty.
- Make clear that actuals will differ from expected BI claim payments.

Part (i) was mostly standard bookwork, and so performance should have been better. Some candidates stated that the amounts recovered from the reinsurers will impact the BI benefit payable. However, insurers are liable to pay their policyholder regardless of whether recoveries are made from their reinsurer. Some candidates stated that it would need to be determined if there was an infection within a 50 km radius. However, the question stated "assuming a valid claim" which implies that this would have been the case.

In part (ii) performance could have been better, given that this was a book work question. Marks were awarded where candidates demonstrated an understanding of the basic principles underlying the two methods and for valid comments.

Part (iii) was the most challenging part of the question, which was reflected in candidates' performance. Candidates who scored well provided a broad overview of the entire process followed to determine the BI reserve, and used the information in the question i.e., that the loss adjustor will determine the BI benefit. Candidates did not score marks where they described how to determine the BI benefit. Some candidates suggested using the chain ladder method or other traditional reserving methodologies. This did not score marks as the question asked to use a bottom-up exposure-based method.

Part (iv) was largely a book work question, which was generally well answered. Candidates were able to generate a wide range of valid points.

END OF EXAMINERS' REPORT

