INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2017

Subject SA1 – Health and Care Specialist Applications

Introduction

The Examiners' Report is written by the Principal 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.

Luke Hatter
Chair of the Board of Examiners
December 2017

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

1. The aim of the Health and Care Specialist Applications subject is to instil in the successful candidates the ability to apply knowledge of the United Kingdom health and care environment and the principles of actuarial practice to the provision of health and care benefits in the United Kingdom.

2. Candidates who approach the questions, especially the more substantial elements of each question, in a methodical and detailed manner are far more likely to pass the subject. Candidates will gain few marks if they do not address the question asked but merely write around the topic of the question. The mark allocation for each question part gives an indication of the relative length of answer or number of points to be made to gain full marks.

3. It is often helpful to use subheadings when answering long part questions.

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

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

Well-prepared candidates scored well across most of the paper. Questions that required an element of analysis or application of knowledge were less well answered than those that just involved bookwork. The comments that follow the questions concentrate on areas where candidates could have improved their performance.

C. Pass Mark

The Pass Mark for this exam was 59.

Solutions

Q1

(i) **Experience**

Subsidiary A could have suffered from adverse morbidity experience over the last few years. 1/2

The actual claim inception rates could have been higher than those assumed in pricing 1/2

or lasted longer than expected. 1/2

The losses could have been the result of a catastrophe event 1/2

Or the accumulation of many claims 1/2

Or the results of a small number of very large claims 1/2

Or random fluctuations in claim amounts. 1/2

Pricing / Profitability

This could have been caused by inadequate underwriting or pricing assumptions are not adequately aligned with underwriting policy. 1/2

There could have been errors in setting the pricing assumptions 1/2

Or errors or flaws in the pricing systems. 1/2

The data used for pricing could be irrelevant or wrong. 1/2

Model points chosen for pricing may have been different from the business profile of policies sold. 1/2

Pricing assumptions may not be adequately aligned with terms and conditions of the policy documents. 1/2

Premium reviews carried out may have been incorrect. 1/2

Guarantees or options may have costed more than expected. 1/2

Product features

This could be due to the replacement ratio being set at too high a level. 1/2

The deferred period may not be sufficiently long enough. 1/2

There could be insufficient prudence margins being allowed for in respect of policies with guaranteed premiums. 1/2

The policy review process could have been ineffective for policies with reviewable premiums. 1/2

Ambiguous or unclear wording in the policy documents could have led to unexpected claims. 1/2

Benefits may have escalated at a higher rate than can be earned on assets leading to more capital required. 1/2

Claims management

Inefficient claims management may have led to worse than expected recovery experience. 1/2

Rehabilitation clauses may have turned out to be less effective than expected; 1/2

This could be due to inadequate rehabilitation help being provided to claimants 1/2

Business Mix

The mix of socio economic groups could have been different to that assumed in pricing, resulted in a higher than assumed risk profile. 1/2

The split of policies sold through different distribution channels could have been different to that assumed in pricing, leading to higher risk profile. 1/2

Reinsurance / Third Party
The reinsurance arrangements may have been inadequate or ineffective. 1/2
There could have been defaults by third parties such as brokers, third party administrator or reinsurer. 1/2

Legislation / Tax Changes
The losses could have been caused by legislation changes 1/2
Regulatory changes could have increased the capital requirements. 1/2
Adverse change in tax could have reduced profit, 1/2
e.g. the removal of deferred tax assets. 1/2

Operational / Expense
The losses could have been caused by adverse expense experience. 1/2
There could have been expense overrun as a result of one-off expenses, e.g. through marketing or implementation of legislative changes. 1/2
The cost of business acquisition may have been higher than expected – e.g. due to higher adviser commission than expected. 1/2
It could have been caused by the default of third party administrator. 1/2
Expense overrun could have been caused by lower than expected new business volume, 1/2
e.g. due to premiums/product features not being competitive 1/2
Or changes in State provision reducing the demand for IP insurance. 1/2
The company could have suffered from fraudulent activities by its management or staff. 1/2
This could have damaged the company's image 1/2
And could have had adverse effects on new business sales. 1/2
The company could have suffered from cyber attacks. 1/2
Expense inflation may have been higher than expected. 1/2

Other
The adverse recovery experience could have been caused by unfavourable economic conditions 1/2
Which could have increased the propensity to claim. 1/2
It could also worsen incident experience as there are likely to be more stress related claims under unfavourable economic conditions. 1/2
The fear of being made redundant could also led to adverse recovery experience as claimants are less willing to go back to work. 1/2
The loss could also be caused by adverse persistency experience, 1/2
In particular for those policies that lapsed in the early durations where initial expenses have not yet been fully recouped. 1/2
The losses could have been caused by adverse investment performance, in particular 1/2
Because of investment in poorly performing assets 1/2
Or a mismatch in assets and liabilities 1/2
Or poor investment advice. 1/2
The product may have been sold as a loss leader. 1/2
The insurer may have been paying fines for misselling policies or other regulatory breaches. 1/2

[**Max 12]**

(ii) Reduce premiums to increase new business sales. 1/2
Increase premiums to reflect the claims experience more adequately. 1/2
Introduce product innovation to increase new business sales. 1/2
Marketing campaign could be launched to increase new business sales. 1/2
Pricing models and methodology could be corrected to ensure that premiums are being calculated more accurately. 1/2
Use more appropriate model points to reflect expected business profile more accurately in pricing. 1/2
Reduce level of guarantees in premiums, or putting more focus on selling policies with renewable premiums. 1/2
Improve the policy review process to stop future losses. 1/2
Tighten policy wording to mitigate risks of anti-selection. 1/2
Improve policy design to reflect underlying risks more closely such as: 1/2
  lower the replacement ratio 1/4
  or increase the length of deferred period (or other suitable examples). 1/4
Carry out regular reviews of experience in order to take corrective action. 1/2
Carry out regular pricing reviews. 1/2
Ensure product features/pricing are competitive in the market. 1/2
Improve Management Information to ensure that performance is being monitored more accurately and frequently. 1/2
Improve the governance and controls over the pricing process. 1/2
Improve underwriting standards 1/2
To allow appropriate premiums to be charged 1/2
And suitable terms/conditions/exclusions to be applied. 1/2
Ensure level of adviser remuneration is competitive. 1/2
Tighten claims definitions, e.g. any occupation rather than own occupation. 1/2
Improve claims management standards. 1/2
Improve rehabilitation help to encourage claimants to go back to work. 1/2
Partial / proportionate / linked claims could be used to encourage claimants back to work earlier. 1/2
Make sure that assets and liabilities are well matched. 1/2
Align risk, strategy and appetite more closely. 1/2
Actively manage the relationships with third party service providers to ensure that they provide high quality services. 1/2
Implement risk control policy in the process of selecting third party service providers. 1/2
Make sure that appropriate reinsurance arrangements are in place. 1/2
Make use of reinsurers' assistance in pricing, underwriting and claims management. 1/2
Carry out regular review of reinsurance arrangements, such as the optimum level of retention, costs and ongoing financial security of reinsurers. 1/2
Mitigate losses through catastrophic event through catastrophe reinsurance or stop loss reinsurance. 1/2
Improve expense efficiency. 1/2
Excessive commission could be reduced or clawback increased / introduced. 1/2
Administration functions could be outsourced to reduce costs. 1/2
Carry out regular review of third party arrangements. 1/2
Only use highly-rated counterparties. 1/2
Improve capital and tax efficiency. 1/2

Only invest in good quality assets to reduce the risk of default. 1/2
Monitor lapses and reasons for lapses. 1/2
Ensure material is clear and set a dedicated retention team, if necessary. 1/2
As well as ensuring the price is modelled accurately, reserves should be modelled accurately to ensure not over-reserving. 1/2
Maintain good quality data. 1/2
Ensure effective feedback loops in the actuarial cycle for updating pricing methodology and assumptions. 1/2
Implement robust risk policy, governance and controls. 1/2
Restore reputation through damage management. 1/2
Change distribution channels or target markets. 1/2
Target different market or socio economic groups. 1/2
Diversify into other products. 1/2
Enhance information and system security to mitigate cyber risks. 1/2
Stop writing new business altogether. 1/2

[**Max 12]**

(iii) **Advantages**

Selling the entire entity is the cleanest solution to de-risk. 1/2
The group will no longer be exposed to the risk of further loss. 1/2
This will enable the group to focus on profit making entities 1/2
and capital may be freed up and used for other, more profitable purposes. 1/2
If the reputation of the subsidiary has been irretrievably damaged, this will sever the link to limit further reputational damage to the group. 1/2
The business written by the subsidiary is no longer in line with the group's strategy and infrastructure. 1/2
The group will not have to maintain a closed block of business if the only other option were to close the book. 1/2
There will therefore be no further issues relating to staff, pension costs and third party service providers. 1/2
The effect is immediate as soon as the entity is sold. 1/2
If an appropriate buyer could be found, the price could be more favourable than the group's expectations. 1/2
Selling an underperforming subsidiary could lead to improvement in share price of the group if investment analysts look on the sale favourably. 1/2

Disadvantages

The group may no longer have market presence relating to income protection business in the domestic market. 1/2
The Group will lose out on potential future profits, if the losses of subsidiary A are only temporary. 1/2
The group will have lost all controls over Subsidiary A 1/2
and potential loss of brand. 1/2
Potential loss of experienced personnel. 1/2
There will be the loss of opportunity of cross-selling other products offered by the group. 1/2
Selling a damaged brand as a measure to limit further reputational issues may not be as effective as anticipated. 1/2
Costs and effort of transactions could be very high. 1/2
There is the risk that the business could be bought by a competitor. 1/2

Other alternatives such as managing a closed book could be cheaper options. 1/2
This could lead to loss of intra-group synergies or efficiencies relating to expenses, capital and tax. 1/2
This could damage the relationships with third party service providers and reinsurers, where the group may still require their services in other subsidiaries. 1/2
There is always the risk of not being able to find a suitable buyer. 1/2
Selling the entire entity will capitalise all the expected losses immediately. 1/2
[Max 6]

(iv) Approach

Company B would need to consider if it wished to bid for Subsidiary A. 1/2
For example, would purchasing subsidiary A offer diversification benefits 1/2
or does Company B wish to enter this particular market. 1/2
Does it offer the potential to cross sell to customers other products offered by Company B. 1/2
The starting point for the calculation would be the appraisal value which = embedded value + value of goodwill. 1/2
Use the information obtained to estimate the embedded value of the company 1/2
Embedded Value = shareholders' net assets + Value of In Force (VIF). 1/2
Net assets should be determined as the market value of assets less the value of liabilities as allowed for in the VIF calculations. 1/2
For the VIF, choose appropriate model points based on the information available. 1/2
Separate calculations should be carried out for premium paying policies and claims in payment policies. 1/2
Project forward future cashflows, including 1/2
Premiums plus investment income less IP claim payments, expenses and change in reserves 1/2
And discount back. 1/2
Would need to consider the one-off investment costs of integrating Subsidiary A into Company B's systems etc. 1/2
Company B will need to consider what return on capital is acceptable for the transaction. 1/2
Impact of competing bids may impact this. For example, if bids from other companies are expected to be competitive then company B may have to accept a lower rate of return in order to win the bid. 1/2
Consider the relative negotiating strength of the parties involved. 1/2
The fact that the subsidiary has underperformed recently may weaken the sellers position meaning more favourable terms for the buyer 1/2
But it will depend on the potential demand for the subsidiary and the reputation of the parent company too. 1/2
The company could consider the prices paid (if known) for other equivalent transactions in the market - consultants may be able to give some indication. 1/2
Company B would consider whether it would continue to run subsidiary A as a stand alone entity or look to subsume it into its own business (e.g. part VII transfer). 1/2
This will affect the level of cost savings / synergies Company B will obtain from the deal. 1/2

Data

The starting point would be to see what information will be provided by the target company. 1/2

The bidder could also supplement this with publically available information such as the regulatory returns and published reports and accounts. 1/2

Compare the information to similar items for own company and also to wider market or reinsurer data. 1/2

Adjust external data to take account of the profile of the target company's policyholders. 1/2

Assumptions

The assumptions will initially be best estimate and allow for expectations of future trends. 1/2

As the company is being valued by the purchaser, more prudent assumptions will be used for sensitivity calculations. 1/2

Levels of prudence would be varied to understand the sensitivity of the key assumptions. 1/2

The risk discount rate will be based on the purchaser's required rate of return on the transaction allowing for the inherent risks and uncertainty within the cashflows. 1/2

Assumptions made will be based on those for equivalent items in the purchasing company where relevant (life insurer) and based on information in the statutory returns of the target company 1/2

And also may be compared to those in the statutory returns of similar health and care insurers 1/2

And other publicly available information such as industry experience surveys. 1/2

Mortality/morbidity assumptions need to be based on the policyholders of the target company. 1/2

Allow for costs and recoveries of any reinsurance arrangements allowing for any treaty renegotiations. 1/2

Allow for commission on current structure for existing business. 1/2

Allow for own expected post takeover policy expenses taking into account expense inflation. 1/2

Allow for potentially reduced costs due to synergies between the businesses 1/2

e.g. expenses, reserving capital, tax. 1/2

Persistency will need to take into account the profile of business and any effects brought about by the takeover. 1/2

For example, there may be policyholders who are unhappy about the takeover and therefore lapse. 1/2

Use own methodology and assumptions for statutory reserving and allow for the effects of combining the business into own existing solvency position, e.g. on any minimum reserving requirements. 1/2

The investment return assumed will be consistent with risk discount rate and expense inflation taking into account the post takeover investment strategy. 1/2

Tax will need to incorporate any changes as a result of combining the businesses and taking account of any differences between the taxation of the life and health insurance business. 1/2

Also need to allow for non policy-related costs of takeover 1/2 e.g. redundancies, costs of policyholder communications, the costs of any outstanding Solvency II development expenses, the impact of any pension scheme deficit, potential relocation costs. 1/2

The goodwill component, which reflects the value of expected future new business, should also be added. 1/2

This will be based on current new business volumes and expectations of potential future market performance of the target company e.g. based on their business plans, if available. 1/2

The value of this new business should be estimated e.g. based on new business disclosures, if available. 1/2

Assumptions used should be as for the existing business, allowing for any known differences e.g. changes to the commission structure post integration. 1/2

Any planned changes to marketing strategy should be taken into account. 1/2

Given the potential uncertainties Company B could scenario test the appraisal value of subsidiary A in different plausible scenarios to assess how volatile the future value of the business could be. 1/2

Consider any published embedded value figures e.g. supplementary information in the Report & accounts 1/2

And look at the share price and market capitalisation, if the company is listed. 1/2

[**Max 15]**

[Total Max 45]

This question required students to apply their knowledge to a particular situation and to consider some of the issues involved from both the point of view of the insurer and the insured. Most students provided a good range of relevant points on most of the part questions and hence generally performed well

Parts (i) and (ii) were generally well answered with candidates providing a wide range of relevant points although few candidates mentioned adverse investment performance or possible fraudulent activity by employees or cyber attacks in answer to part (i).

Part (iii) was generally less well answered. Relatively few candidates discussed aspects such as issues with running off a closed block of business, the risk that a competitor buys the subsidiary or the potential loss of experienced personnel and the opportunity to cross sell other products.

Part (iv) was generally poorly answered. Few candidates discussed the reasons why Company B may wish to make an offer, the effects of other bids or what data might be available and what other information might be sought. Whilst many candidates noted that an appraisal value of the company was required many failed to discuss in any detail the type of assumptions that would be used to calculate the embedded value of the existing business. Similarly, many candidates failed to provide any detail regarding the goodwill element of the appraisal value.

Q2

(i) Set a maximum age for the exercise of the option, e.g. age 60 when claim is admitted. 1/2

Set a maximum period when the option must be taken up, e.g. within 2 years of the claim being admitted. 1/2

Any special terms and/or exclusions under the original benefit could also apply to the option policy. 1/2

Limit the sum assured to which the option can be added 1/2

e.g. up to a maximum of £250k. 1/2

For cancer claims could require that there has been no subsequent recurrence of any cancer after a period say 1 year. 1/2

The option policy term could be reduced to say five years. 1/2

Tiered benefits could be offered. 1/2

Healthier lives could be targetted. 1/2

Ensure robust underwriting of the policyholders 1/2

Or offer only for standard lives. 1/2

Ensure robust claim management of the policyholders claim. 1/2

Follow strict ABI definitions of heart attack, stroke and cancer; 1/2

Coverage cannot be reduced otherwise not considered a critical illness policy. 1/2

Obtain reinsurance to include the option benefit. 1/2

Ensure that marketing and other policy literature is clear in its description of the option. 1/2

Ensure that the sales process explains clearly the option and their implications for premiums and benefits. 1/2

[Max 5]

(ii) The insurer needs to decide what the objective of adding the new option is. 1/2

For example is it to attract more new business, retain customers for longer, make more profit per policy etc 1/2

And what would success look like (e.g. by adding the option it writes £x million more business) 1/2

And how it will measure whether it has successfully achieved its objective. 1/2

The insurer should consider whether competitors are offering similar options on their CI policies 1/2

In which case it may need to enter market anyway to maintain market share. 1/2

The insurer should consider the model required to price the option. 1/2

It may be required to be stochastic which could require time, money and expertise to build. 1/2

The insurer would need to consider the availability of data for pricing. 1/2

The insurer should compare the terms of its option to its competitors. 1/2

The insurer should consider the cost of adding the option against the competitor's option costs. 1/2

The insurer should consider whether consumers are looking for and purchasing these options. 1/2

Market research should indicate whether there is a demand for the option. 1/2

The attitude of the distribution channels should be sought. 1/2

If the cost of option is out of line with market, e.g. too high, the insurer may reconsider the design of the option (e.g. the removal of option or the addition of features to differentiate this product from its competitors). 1/2

If the cost of option is too low, the insurer may increase the cost to be more in line with the market. 1/2

Product literature may need updating, the option needs to be clearly defined in the literature. 1/2

The quotation systems will need amending. 1/2

The insurer may review its underwriting processes, making underwriting stricter at outset of policy. 1/2

The insurer needs to ensure it can administer the option and systems are changed in order to identify the new option. 1/2

The extra costs involved in potential extra underwriting, extra training of staff and extra marketing literature need to be taken into account. 1/2

The profitability of the business with and without the option should be considered. 1/2

The insurer should ensure there is sufficient capital to meet the increased capital requirements. 1/2

There is a risk of lapse and re-entry – these will be selective 1/2

The views of the reinsurer will be relevant. 1/2

The insurer may need to retender the business depending on reinsurer. 1/2

The cost of reinsurance would be considered. 1/2

Reinsurance cost relative to option cost and perceived risk are factors in determining reinsurance level. 1/2

Any regulatory guidelines or rules around offering options would be considered. 1/2

The insurer could make the option compulsory (so a feature rather than an option) to reduce the risk of selective take-up. 1/2

The insurer could target healthier lives e.g. by offering discounts on gym membership. 1/2

[Max 8]

(iii) A cash flow approach allows the insurer to:

Allow for stochastic assumptions when valuing the option 1/2

And more easily incorporate assumptions that vary over time, 1/2

For example, morbidity, mortality, lapses, investment return. 1

The premium-related and claims-related cashflows can be inspected separately. 1/2

It allows for the more accurate timing of events 1/2

And help plan capital requirements. 1/2

It is easier to explain what is happening. 1/2

The anti-selection effect of the option can more easily be allowed for. 1/2

The risk discount rate can take account of the term structure of risk free rates. 1/2

Tax can be allowed for more appropriately. 1/2

The impact of net negative cash flows in any period can be allowed for. 1/2

The sensitivity of profit to variations in experience of deterministic assumptions can be investigated so as to determine the risks and appropriate margins for the parameter values 1/2

And it is easier to use for scenario testing. 1/2

Explicit allowance for reserves (accumulation of reserves) 1/2

And the cost of capital/solvency requirements. 1/2
The cashflows enable the insurer to assess the financing requirements for new business by incorporating these cashflows into the in force model to see the impact of the financing requirements on the company as a whole. 1/2
The expected return on capital can be measured. 1/2

[Max 5]

(iv) Methodology

A stochastic modelling process may be used to establish the likelihood of the option cost.
This is a multi-state model, with transition intensities from healthy to 1 disease to 2 diseases (post option take up). 1/2
Obtain data from reinsurers, population etc and adjust to policyholder experience. 1/2
Determine a set of model points which represent the expected new business 1/2
Based on the profile of the existing business and 1/2
Allowing for any expected changes in the profile. 1/2
Determine an assumption for the proportion of policies who effect the option once a claim arises. 1
For each model point, use Monte Carlo simulations for the stochastic parameters (or run thousands of scenarios), 1/2
And deterministic values (likely best estimate) of the other parameters 1/2
To project forward the cash flows. 1/2
Allow for reinsurance premiums and recoveries. 1/2
The company should discount the cash flows at a discount rate (likely a risk free discount rate). 1/2
From these simulations the insurer can determine the distribution of the claim costs under the option and the value of premiums. 1/2
From these distributions the best estimate cost and capital requirement can be estimated. 1/2
The cost of capital can be calculated by discounting the cost of the capital requirements. 1/2
Allowance made for insurer's required profit target. 1/2
These will form the basis of the loading required. 1/2
It is likely that the charge for the option will be a percentage of premium. 1/2
Feasibly, only the key parameters, perhaps only the morbidity claim frequencies would be stochastic. 1/2

Assumptions

Because of trends in incidence for each of the various critical illnesses covered moving in different directions and at different rates formulating reasonable stochastic models will be a challenge. 1/2
Further, morbidity and mortality claim frequencies from the point of claim admittance will be higher than pre claim period 1
for example, someone claiming for cancer is perhaps then more likely to make subsequent cancer claims in the future. 1/2
Need to allow for anti-selection. 1/2
The reasonableness of the model and therefore measurement of the risk will vary directly with the relevance and volume of claims incidence data available. 1/2

Assumptions other than morbidity are
.... withdrawals 1/2
.... expenses 1/2
.... mortality, investment returns and tax 1/2
.... allow for anti-selection 1/2
….time of exercising option - will depend on duration and reason for claim 1/2
.... take-up rates 1/2
….higher risk of selective option taking 1/2
.... higher rates of morbidity likely result in greater take-up rates 1/2
Offset can be taken for the percentage of policyholders that will not exercise the option even when it is to their advantage (e.g. due to apathy or forgetfulness). 1/2
A high proportion may be expected to exercise the option as it will appear valuable. 1/2

Checking reasonableness of results
The cost will also need to be assessed against standard critical illness rates. 1/2
The insurer may use scenario testing to compare with results of the stochastic model. 1/2

Finalise loading
The individual loadings from the model points, should be scaled up for the expected new business to finalise a loading for the option loading. 1/2
The loadings/cashflows from the model points, should be scaled up for the expected new business to ensure that the required level of profit can be reached in aggregate without each individual model point being profitable in its own right. 1/2
However if this is the case the company may be exposed to the risk of a change in the mix of business. 1/2

[Max 12]
[Total Max 30]

In part (i) several candidates failed to provide sufficient actions to gain many marks. Some candidates suggested removing the coverage of one or more of heart attack, stroke or cancer illnesses but this would have meant that the policy was no longer a critical illness one. Few candidates mentioned reviewing the marketing literature or the sales process.

Part (ii) was generally well answered with candidates providing a wide range of relevant points although few candidates discussed the reasons why the insurer may wish to add this option or how success or otherwise might be measured.

Part (iii) was generally less well answered with few candidates providing a wide range of points. Only the better candidates made points such as allowing for analysis of premium-related and claims-related cash flows separately or the ability to allow for a term structure of risk free rates.

Part (iv) was also generally poorly answered. This was essentially a pricing question but only the better candidates discussed the assumptions involved in calculating the option cost. Few candidates mentioned that morbidity and mortality rates would be expected to be higher following an initial claim on the policy. Similarly few candidates mentioned how the cost of the option would be applied or how the loading would be finalised.

Q3

(i) **Market research**

The insurer will need to assess the potential size of the target market 1/2
And whether there would be a demand for the Group IP products. 1/2
The insurer will need to understand which product terms / features are most valued in the group protection market. 1/2
The insurer will consider whether it has sufficient market knowledge and skills internally in respect of group IP business to successfully enter the market. 1/2
The insurer will need to assess how much volume the company could sell. 1/2
This could be done through: 1/2
- Customer (employers) opinion polls 1/2
- IFA questionnaires 1/2
- Looking at the volumes of competitors 1/2
- Looking at overseas markets 1/2

The insurer may work with consultants / reinsurers 1/2
To understand how the product would be sold 1/2
As the distribution channels for group products tend to be different than for individual products 1/2
And they are mostly sold through specialist brokers. 1/2
The insurer will assess how much commission would the brokers require. 1/2
Any compulsion in the market for employers to provide IP insurance that might impact demand will be considered. 1/2

The competition in the market will be investigated, 1/2
What products competitors offer 1/2
And how the company would differentiate itself from the competitors 1/2

Pricing / profitability

The insurer will need to:
Consider potential pricing. 1/2
Consider affordability. 1/2
Consider the costs of development / systems / staff / training etc. 1/2
Assess the potential profitability. 1/2
Consider whether the company be able to recover its development costs. 1/2
Assess its ability to meet the required return on capital. 1/2
Consider the availability of capital and 1/2
Alternative uses of capital. 1/2
Consider how offering this product could affect the profitability of other business the insurer sells 1/2

e.g. could it spread its overheads over a larger number of policies improving the profitability of its other products. 1/2

The insurer would consider the availability of reinsurance 1/2
And the price. 1/2

Company
The insurer would consider whether the group product fits with company strategy 1/2
And whether writing group products fits with the insurer's risk appetite 1/2
And how the solvency position of the company would be affected. 1/2

Other
Would the company require further licences to sell group products 1/2
Or any further regulatory constraints. 1/2

[Max 8]

(ii) Underwriting
The underwriting process is different 1/2
For example, there is free cover limit. 1/2
There is often limited information about the participants; 1/2
Sometimes not very exact or difficult to understand or only summarised information provided. 1/2
The anti-selection risk is different in group products 1/2
as there is less scope for individuals to anti-select (if cover is compulsory) but there could be anti-selection by the group policyholder: employers who know they have high sickness rates amongst their staff may be more likely to buy the cover. 1/2

Morbidity
The company will be more exposed to catastrophe events 1/2
For example plant explosion (or other relevant examples). 1/2
There is concentration risk 1/2
by: location; 1/2
Industry/profession; 1/2
Age band; 1/2
Lifestyle. (marks given for up 2 two concentration risk types). 1/2
e.g. teachers suffering from stress; builders suffering from physical conditions. (or other relevant examples) 1/2
Types of groups may be employers; professional associations; trade unions. 1/2
There will be different risks for each and also across different industries. 1/2
Also, some employers may pay sick pay directly for a period and others may not. The product may need to be flexible to meet the conditions of different employers. 1/2

Pricing
The insurer may not have data to price the product appropriately 1/2
Or may not have knowledge / experience in pricing such products and hence misprice 1/2
And hence suffer significant losses on a scheme if mispriced. 1/2

Commission levels will need to be decided. 1/2
The contracts are annual (or only few years long) 1/2
But pricing usually assumes that some schemes will renew; 1/2
The company could suffer losses if the renewal levels are lower than expected. 1/2
The new business volumes could also be too high, leading to capital and resource strain. 1/2
Expenses may be higher because of development costs. 1/2
There is lapse and re-entry of existing individual policyholders if their employer starts offering IP. 1/2
There is a risk of lower profit margins on some or all business. 1/2
Profit sharing may have to be introduced. 1/2

Sales
The distribution of group products is different to individual products 1/2
So the company risks not having appropriate distribution channels to sell its products; 1/2
Hence the volumes could be very low 1/2
And the company would not be able to cover its development costs. 1/2
The distributors could misunderstand the new group product 1/2
Causing misselling or reputational damage. 1/2
The sales process is different, it often involves tendering for the schemes 1/2
Where indicative pricing is required in short time frames. 1/2
The company may not be able to meet the required turnaround time due to its processes. 1/2
Group business is likely to grow less smoothly than individual business: 1/2
a large group contract could be won and then nothing for weeks, whereas individual business may provide a smooth regular pipeline of new business. 1/2
It means that resource planning has to be flexible to meet the demand. 1/2
The insurer may not have the policy administration resources to handle taking on board a large group. 1/2

TCF / marketing
The insurer could make errors in terms and conditions and hence be liable to more claims than expected. 1/2
The insured may misunderstand the terms and conditions. 1/2
The terms and conditions may not be communicated clearly to the insured, as they are part of the group scheme. 1/2
There may be issues with workplace marketing. 1/2

Other
IT and other systems will need to be changed. 1/2
There are operational risks from the failure of processes/staff. 1/2
Group product introduces new risks that were not relevant to individual products – e.g. mass lapse. 1/2
The level of competition will need to be considered. 1/2
There may be credit risk with brokers and other third parties. 1/2
The insurer may be unable to obtain the licence to write group products 1/2
Or issue of the licence may be delayed. 1/2
The extra administration burden could lead to worse service on its existing product, causing reputational damage. 1/2

Group IP may be more exposed to changes in the economic situation than individual IP (as an employer going out of business would lead to a large loss of income vs a few individual policies being potentially cancelled). 1/2
If group IP is compulsory for employers to provide, there is a risk that this might change in the future. 1/2
Investment risks are different as short-term business rather than long-term. 1/2
Cyber security issues would need to be considered 1/2
Reinsurance may be unavailable. 1/2

[Max 9]

(iii) **Product design**

Decide on particular product features, 1/2
If there will be major differences from the ones offered to individual customers 1/2
Such as deferred period and waiting period offered 1/2
Or additional benefits, such as rehabilitation benefit or partial benefits. 1/2
Write terms and conditions 1/2
And other required customer documents and illustrations. 1/2
Specify underwriting for the policies 1/2
For example free cover limit. 1/2
May ask reinsurer or consultants for assistance. 1/2

Pricing

Price the product. 1/2
Obtain data. 1/2
It may be based on own experience 1/2
Or could use external data for pricing. 1/2
Reinsurer may provide assistance with pricing. 1/2
Negotiate reinsurance deals. 1/2
Check that the product meets the company's profitability criteria. 1/2

Product management

Update IT systems. 1/2
Update website with new product. 1/2
Staff training. 1/2
Consider offering continuation on exit of group scheme products. 1/2
Write marketing materials. 1/2

Distribution

Negotiate distribution deals. 1/2
Decide on commission paid. 1/2
Train distributors. 1/2
Launch an advertising campaign in specialist literature. 1/2

Other

If company does not have enough skills internally then it will need to consider employing people who know about group IP market. 1/2
Agree new processes for group IP business. 1/2
Develop control cycle in order to monitor experience and feed back into pricing. 1/2
Obtain licence to write product, if required. 1/2

Notify the regulator about new product, if required.	1/2
Consider tax implications.	1/2
Consider reporting requirements.	1/2
Consider solvency capital calculations.	1/2
Consider availability of capital	1/2
And potential other uses.	1/2

[Max 8]
[Total Max 25]

All three parts of this question were generally very well answered. The answers were cross marked between all three question parts so that credit was given for relevant points made in answer to a different part to that where the point is shown in the mark scheme above, where appropriate.

In part (i) candidates generally gave a wide number of points although few discussed how this might affect the profitability of other products offered by the company or whether the product fitted the company's strategy or risk appetite.

Similarly part (ii) was also well answered, with the better candidates discussing such aspects as the product generally being annual, or points relating to treating customers fairly. Few candidates discussed that the sales process is different and often requires tendering for schemes with indicative pricing needed in short time frames which the insurer may be unable to meet, that group business is likely to grow less smoothly than individual business and is potentially more exposed to changes in the economic climate or that this might impact the service provided on the insurer's other products.

Part (iii) was usually well answered with many candidates again providing a good range of points. Few candidates mentioned updating the insurer's website with the new product or considering providing continuation options on exit from the group product.

END OF EXAMINERS' REPORT