INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

September 2021

CP3 – Communications Practice
Core Practices

Introduction

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

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

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

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

Sarah Hutchinson
Chair of the Board of Examiners
December 2021

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

Written communication [90 marks]

Produce a written piece of communication that explains a scenario typically faced by an actuary in their day to day work. This communication will be aimed at a non-actuary, although the target audience's level of financial knowledge and understanding will vary from question to question.

The communication needs to be of a standard that would be acceptable as a first draft. It is important that the recipient would both understand the communication and be satisfied with the response. The marking schedules include details of the marks awarded including the necessary content. To the extent that it makes the communication unclear or confusing for the audience, marks may also be lost for including irrelevant content or details that candidates have specifically been asked to exclude from their solution.

Reflective questions [10 marks]

A set of questions designed to allow candidates to consider the approach that they took in their communication and justify certain decisions. For example, candidates may be asked what information they felt was relevant for this audience, or which terms they specifically excluded because they would constitute jargon.

Candidates are provided with some background reading a few days before the exam (the Scenario Material) to allow them to familiarise themselves with the scenario without being under exam conditions. Candidates are expected to read the information provided, but are not required to do any further reading or research around the scenario.

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

Candidates were asked to produce a paper for a team of professional medical underwriters, explaining how an element of their work influenced the actuarial pricing of the business. This is in some respects a more knowledgeable and technical audience than in recent CP3 exams, and some candidates struggled with this. Good scripts were tailored to this audience, and did not spend time explaining basic concepts with which they would be familiar, such as the use of underwriting loadings to differentiate insurance premiums based on the health of the policyholder. However, all actuarial concepts, in this case largely focussed around analysis of experience, needed to be fully explained.

The topic for this exam was more technically complicated than recent CP3 exams. However, all technical content was introduced in the scenario material. Candidates who used this to prepare thoroughly should not have needed to spend significant time in the exam working through the technical elements.

The examiners noticed inconsistencies between Question 1 and Question 2 for some candidates, often with Question 2 describing something that was not demonstrated in Question 1. For example, candidates were able to identify in Question 2(i) that they could reasonably assume that the underwriters would know how underwriting loadings impact premiums, but in their paper went into detail explaining this concept. We would

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encourage candidates to use the questions asked in Question 2 as a prompt to think in detail about the intended audience for the paper.

C. Pass Mark

The Pass Mark for this exam was 56
1311 presented themselves and 748 passed.

Solutions for Subject CP3 – September 2021

Q1
Format of Answer
(i)
Paper format:

Clearly addressed to the Underwriting Team or Meghan	[1]
Suitable title for paper	[½]
Title mentions impact of underwriting loadings on pricing	[½]
Date	[½]
Author	[½]

(ii)
Grouping of ideas:

Document is grouped into an appropriate number of sections	[2]

(iii)
Logical order between sections:
Consider the overall heading and purpose of the section rather than the content within it

if read once and clear	[2]
if needed to re-read parts	[1]
otherwise	[0]

Logical order of points within each section:
Consider the order of points within each section

if read once and clear	[3]
if one section needed to be re-read	[2]
if two sections needed to be re-read	[1]
otherwise	[0]

Points within each section are directly relevant to the heading	[1]

Appropriate short headings on each section:

All headings are appropriate	[2]
only one inappropriate heading	[1]
otherwise	[0]

Sentences kept brief:

If there are no overly long sentences	[2]
if there is one overly long sentence	[1]
if more than one overly long sentence	[0]

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(iv)
Mark best chart or table:
Graph:

Clear title	[1]
axes labelled	[1]
correct chart type of the data being shown	[1]

Table:

Clear and simple headings of columns	[1]
easy to read and interpret	[1]
no unnecessary rows of data	[1]

Chart / table summarises the latest experience analysis results for policyholders with and without an underwriting loading	[2]

[Marks available 8, maximum 5]
[Total 20]

A surprising number of candidates failed to address their papers to the intended audience, or date their paper. These are easy marks and typically always required. Candidates should also note that there is no need to include a covering email and no marks are awarded for this.

To gain high marks for the grouping and ordering sections of the mark scheme, candidates should consider the prior knowledge of the audience. It is important to walk the audience through the key points ensuring they are giving sufficient background information. Grouping too many concepts into one section can also distract or confuse the audience. For example, in this paper it is better to give a general explanation of the concepts of an experience analysis before explaining the impact of policies with an underwriting loading.

Candidates typically lost marks on the visual aid section by not filtering the information (e.g. producing a table with a number of unnecessary rows, rather than focusing on the key information), or failing to label charts and tables adequately so that they can be understood at a glance.

Language Used
(v)
Overall Language:

Language used is simple and will be easily understood by the underwriting team	[5]
professional tone	[1]
avoid colloquialisms, informal and/or emotive language	[1]

(vi)
Jargon and terminology

absence of technical terms	[6]
superfluous accuracy of numbers	[1]
absence of irrelevant points of content	[5]

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(vii)
Grammar, spelling and punctuation [3]
[**Total 22**]

A number of candidates used quite emotive language, for example referring to 'alarming' market practice, or the levy of 'excessive charges'. The report needed to be balanced and professional, and this sort of language should be avoided.

Marks were often lost on this paper for irrelevant points. These were often for explanations of concepts with which the audience would be familiar. For example, a number of candidates went into detail about what an underwriting loading is.

Candidates should also remember that the ability to use spell-checking software does not negate the need to proofread. Errors such as typing 'morality' rather than 'mortality' are not detected automatically.

Content:
(viii)
Introduction:
Note looks at the impact of policy holders with an underwriting loading on pricing [2]
Acknowledge motivation for the question:
Underwriting loadings not intended to be prudent [1]
underwriting team are concerned if there is evidence of prudence [1]
and would like to consider whether they should take steps to try to
eliminate any prudence [1]
sign post the content of the note [2]

(ix)
Experience analysis explanation:
Past performance is used as an indicator of likely future claims rates [2]
start with our view of average claim rates across the market [1]
consider how many claims ABC would expect to pay if it had experienced
average claim rates [1]
compare this to the actual claims that have been paid [2]
if ABC has paid more claims than market average then prices should be increased [1]
this implies that the policyholders that buy cover with ABC are higher risk / are
more likely to claim than the market average [1]
if ABC has paid fewer claims than market average then prices can be decreased [1]
Implies that ABC attract lower risk policyholders / those that are less likely to claim [1]
[Marks available 10, maximum 8]

(x)
How is business with an underwriting loading allowed for?
Analysed separately [1]
same basic analysis, but expected claims rates are adjusted to allow for the rating [2]
lower experience on those with a loading vs those without implies that
ratings are prudent [1]

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this is because we are increasing the premiums for these policyholders by a higher proportion than the increase in claims that we observe [2]
Implies we will make more money on policies with an underwriting loading than on those without [1]
To ensure that prices are as competitive as possible, we use this additional margin to reduce prices on all policies [2]
The benefit of good experience that we see on policies with an underwriting loading is spread across all policyholders [2]
There is a cross subsidy between those with an underwriting loading and those without [2]
Final premiums are set to ensure business hits profit targets overall, after taking cross subsidies into account [1]

[Marks available 14, maximum 9]

(xi)
Results and impact of the experience analysis:
Outline the results of the experience analysis for business with and without an underwriting loading [2]
Business without an underwriting loading is running roughly in line with expectation [1]
Business with an underwriting loading has seen significantly lower claims than expected. [1]
Claims on policies with an underwriting loading are 25% to 30% lower than expected [1]
This leads to a reduction of around 5% once this impact has been spread across all policies [2]

[Marks available 7, maximum 6]

(xii)
Project to eliminate prudence in ratings:
Reducing prudence within underwriting loadings would be fairer to policyholders who are given a loading [2]
However, underwriters need to consider whether some prudence is desirable if there is significant uncertainty in the analysis [2]
this is in line with the pricing philosophy [1]
Need to consider commercial implications – would bring ABC out of line with the rest of the market [1]
Should lead to more business with an underwriting loading, but may increase standard pricing, so implication on volumes is not clear [2]

[Marks available 8, maximum 6]

(xiii)
Summary:
Confirmation that we do see better experience on business with an underwriting loading than business without [1]
But the benefit is spread across all policyholders [1]
Investigating whether prudence can be reduced could be beneficial, but commercial implications must be considered [2]

[**Total 40**]

Candidates typically lost marks for their explanations of the experience analysis process. Descriptions were often not simple or comprehensive enough to be understood by a non-actuarial audience. The explanation of the impact of underwriting loadings was often not

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clear. In particular the cross-subsidy between lives with an underwriting loading and lives without was not generally well explained.

Most candidates were able to pick out the key results and present these. Explanations of the potential consequences for eliminating prudence in the underwriting loadings were generally good, with candidates scoring well in this area.

Overview:
(xiv)
The underwriters will be completely satisfied with the response to the question [6-8]
and the responder has made a good impression on the underwriters.
The communicated answer is clear and easy to read, the response flows through to a conclusion. It looks good, it is well set out, and it has the right tone of voice.
It satisfactorily and completely answers the question. The responder has made a good impression on the underwriters.

The underwriters are left with some question marks over the responder and [3-5]
therefore over aspects of the answer given.
The underwriting team has been given an answer that is partially understandable although the response does not quite flow freely through to a conclusion.
Some information in the argument is obviously missing and/or there are one or two visual mistakes and anomalies in the look of the response. Some technical terms may have been used that are not entirely clear. The underwriters are left with some question marks over the responder, and perhaps therefore over aspects of the answer given.

The underwriters are left with a poor impression of the responder, [0-2]
is confused by the answer and/or does not trust the answer.
The answer will leave the underwriters confused. The communication is poorly written or possibly too technical. There are some obvious mistakes in the arguments, tables or charts do not make sense and/or are not properly labelled.
The answer does not flow, but rather jumps around. The layout is not consistent throughout the communication. There may be spelling mistakes or the underwriters have not been properly addressed. The tone of voice is wrong, perhaps too informal,
The underwriters have been left with a poor impression of the responder and therefore do not trust the answer.

[Marks available, 8]
[**Total 90**]

Candidates who scored well here were able to tailor their responses to the audience of medical underwriters. They did not explain concepts that the underwriters would be very familiar with in detail, such as underwriting loadings, but explained any actuarial concepts in full and without using jargon.

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Q2

(i)

Prior knowledge assumed

Examples:

An understanding of how ratings are applied to life insurance business –

Given that the underwriters are the team responsible for deciding on the ratings that policyholders receive, it is fair to assume that they have a detailed knowledge of how the ratings work, and there is no need to explain this [2]

An understanding of the commercial links between the volumes of business written and the profits of an insurance company – The basic business case for insurance should be familiar to everyone who works within an insurance company. The link between volume and profit is reasonably simple, and should have been easily grasped by everyone in the underwriting team. [2]

(ii)

Order of information

Confirmed at outset that we do allow for rated experience in the experience analysis. [1]

I explained the background of what an experience analysis is before going into the subtleties of how rated experience impacts it. [1]

I fully explained how the experience analysis works before presenting the most recent results to concentrate only on the impacts for our results [1]

Finally, I addressed the potential for the project – this is looking to the future and so it makes sense to present this last. [1]

(iii)

Jargon – credit best two examples

For two valid examples of jargon [1]

For two valid explanations of jargon [1]

[**Total 10**]

Part (i) was generally well answered by candidates. However, candidates struggled with (ii), often not directly answering the question. They were asked to describe how they structured the information in their paper, but many answers were focussed on the content that they covered.

For (iii), any reasonable piece of jargon was credited, but it has to be relevant to the scenario in the question. For example, 'Credibility' should be excluded as jargon. However, 'mortality improvement factor' may be jargon for the audience, but is irrelevant to the paper that the candidate is drafting, and therefore is not an acceptable answer for this question.

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Jargon List

Always jargon	May be Jargon	Not Jargon
Credibility Pricing multiple Anti-selection IBNR Incurred but not reported Central best estimate Any equation (other than A/E) Exposure	Actual / Expected A/E Mortality tables Lighter / heavier experience	Underwriting loading Underwriting rating Rated life Cross subsidy

[Paper Total 100]

END OF EXAMINERS' REPORT

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