Report to ECC from the Board of Examiners

SEMESTER 1 2015

PART III

BOARD OF EXAMINERS' REPORT

(Public Version)

Publisher
The Institute of Actuaries of Australia
ABN 69 000 423 656
Level 2, 50 Carrington Street
Sydney NSW 2000
Tel: +61 (0)2 9239 6100, Fax: +61 (0)2 9239 6170
www.actuaries.asn.au

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Examination Administration

The Semester 1 2015 Part III examinations of the Actuaries Institute ("Institute") were held from the 28 April through to the 8 May 2015.

Pass Rates

The number of candidates presenting for the Semester 1 2015 Part III Exams, the number of passes and the resulting pass rates are shown in the table below, together with the corresponding numbers for the previous three exam periods.

Table A: Pass Rates by Part III Course

	2015 (1)			2014 (2)			2014 (1)			2013 (2)		
	Sat	**Pass**	**%**	**Sat**	**Pass**	**%**	**Sat**	**Pass**	**%**	**Sat**	**Pass**	**%**
2A Life Insurance	65	20	**31**	56	25	45	62	16	26	59	25	42
2B Life Insurance	53	21	**40**	51	20	39	60	22	37	44	17	39
3A General	90	28	**31**	76	15	20	66	17	26	76	14	18
3B General	54	20	**37**	63	24	38	61	16	26	64	17	27
5A Invest. Man.	n/a	n/a	n/a	32	17	53	n/a	n/a	n/a	41	21	51
5B Invest. Man.	24	15	**63**	n/a	n/a	n/a	24	7	29	n/a	n/a	n/a
6A GRIS	21	10	**48**	n/a	n/a	n/a	15	9	60	n/a	n/a	n/a
6B GRIS	n/a	n/a	n/a	11	7	64	n/a	n/a	n/a	17	7	41
ST9 ERM	104	38	**37**	113	41	36	98	22	22	98	39	40
ST1 Health & Care	19	6	**32**	19	3	16	20	2	10	20	9	45
C10 CAP	78	47	**60**	85	49	58	86	52	60	84	49	58
Total	**508**	**205**	**40%**	**506**	**201**	**40%**	**492**	**163**	**33%**	**503**	**174**	**35%**

For this semester, all subjects, except CAP, were assessed on the new model comprising

10% online forum participation, 20% multiple choice questions and 70% for two or three long answer questions.

The Chief Examiners aim to produce consistent standard of passing candidates, rather than a consistent pass rate from year to year. The overall pass rate for this semester is 40%, which is the same as the pass rate for the previous semester. This is a pleasing result.

It is pleasing that the 3A pass rate increased from the previous semester and the 5B pass rate increased significantly from the previous exam in Semester 1 2014. However it is disappointing that 2A pass rate decreased from the previous semester.

Fellows

The number of members that will be made Fellows (subject to attendance at a Professionalism Course and paying any relevant exemptions) will be:

Table B: Number of Fellows

2015 (1)	2014 (2)	2014 (1)	2013 (2)	2013 (1)	2012 (2)	2012 (1)
29	39	32	31	29	27	43

Online Forum Participation

The online forum participation mark continued for all Institute delivered courses this semester except C10.

Students are required to post 2 original posts and 4 replies. A participation mark was awarded based on the quality of these posts.

The following table provides a distribution of the participation marks received by students (excluding those who withdrew or did not sit the exam):

Participation Mark	Subject						
	2A	2B	3A	3B	5B	6A	Total
10	28	8	34	14	17	16	117
9	19	11	13	18	2	2	65
8	10	15	20	11	0	2	58
7	1	5	8	6	0	0	20
6	1	4	2	2	0	1	10
5	0	4	3	0	0	0	7
4	0	1	0	0	2	1	4
3	1	0	0	0	1	0	2
2	3	0	0	0	0	0	3
1	1	0	1	0	0	0	2
0	1	6	6	3	2	1	19
No. of Candidates	65	54	87	54	24	23	307
Average Mark	8.2	7.1	8.1	7.9	8.3	8.9	8.0

Observations:

- Except for 2B, the engagement by students in the online forums continues to be very good. This is a pleasing result.
- The proportion of students achieving the maximum mark of 10/10 was 38%, a significant increase on the 27% for the previous semester.
- For this semester and the previous semester, 2B has the lowest average participation mark of all the subjects. In particular, a relatively high number of students did not make any posts (6 in all, 11% of the total). The importance of the participation assessment needs to be reinforced to students in 2B.

Examination Administration

1. Course Leaders

Since October 2004, Course Leaders have been appointed by the Institute to undertake a variety of tasks relating to modules 1-3 of the Part III education program. Course Leaders draft examination questions, conduct tutorials, monitor forums and assess the online participation mark. The following is a list of the Course Leaders for this semester:

Table 1: Course Leaders

Course	Roles
2A	Exam: Aaron Bruhn Tutorials, Forum Participation: Bruce Thomson
2B	Long Answer Question Writers: David Ticehurst and Randy Amidharmo MCQ Writers: Sammy Liu and Kimberley Wang Tutorials: Richard Land Forum Participation: Andrew Patterson
3A	Exam: Daniel Lavender Tutorials: Jeff Thorpe Forum Participation: Felix Tang
3B	Exam: Jacqui Reid Tutorials: Ben Qin Forum Participation: Mathew Ayoub
5B	Exam: Tim Kyng Tutorials, Forum Participation: Marlon Chan
6A	Exam: Vivian Dang Tutorials: Vivian Dang and Andrew Leung Forum Participation: Vivian Dang
ST9	This course is run completely external to the Institute.
ST1	This course is run completely external to the Institute.
F101	This course is run completely external to the Institute
CAP	David Service

2. The Board of Examiners

The Board of Examiners oversee the Part III examination process of the Actuaries Institute. The Board of Examiners consist of the Chair and the Chief Examiners for each subject, supported by Institute staff.

The constitution for the Board of Examiners for this semester was as follows:

2.1. BoE Chair

Chair Gary Musgrave

2.2. Chief Examiners

Course 2A:	Life Insurance	Andy Siu
Course 2B:	Life Insurance	Matthew Wood
Course 3A:	General Insurance	Nadeem Korim

Course 3B:	General Insurance	David Xu
Course 5B:	Investment Management & Finance	David Pitt
Course 6A:	Global Retirement Income Systems	Stephen Woods
Course 10:	Commercial Actuarial Practice	Bruce Thomson

I would like to take this opportunity to thank all of the members of the Board of Examiners and their assistants for their efforts in preparing and marking the examination papers. The management of the examination process is an extremely important function of the Institute and it is currently being run by a small group of committed volunteers.

2.3. Meetings of the Board

The Board met on three occasions this semester as part of the exam process as follows:

Table 2: Meetings of the Board

Meeting	Purpose
14 January 2015	• Update on enrolment numbers and course offerings for this semester. • Identify Chief & Assistant Examiners and Course Leaders for each course for this semester. • Outline the responsibilities of Chief Examiners and this semester's schedule. • Review progress on the drafting of the exams to date
25 March 2015	• Discuss the status of this semester's examination papers, model solutions and sign-off process. • Discuss the marking spreadsheets and review the recruitment of markers.
10 June 2015	• Review the recommended pass lists and treatment of borderline candidates.

3. Assistant Examiners

The Assistant Examiners for Semester 1 2015 were:

Course 2A:	Life Insurance	Alissa Holz and Bridget Browne
Course 2B:	Life Insurance	Natalie Tan
Course 3A:	General Insurance	James Pettifer and Yvonne Wong
Course 3B:	General Insurance	Grace Ng and Ammar Khan
Course 5A:	Investment Management & Finance	N/A
Course 6B:	Global Retirement Income Systems	Jim Repanis
Course 10:	Commercial Actuarial Practice	Matthew Ralph

4. Scrutineers

The Scrutineers for Semester 1 2015 were:

Table 3: Scrutineers

Course	MCQs	Longer Answer Questions, Case Study Assignment and Exam
Course 2A	Elizabeth Guo, Ka Ki Ho, Xue'Er Lin, Chung Law	Elizabeth Guo, Chung Law
Course 2B	Xiaocong Li, Elizabeth Guo, Keith Cheung, Jennifer Bonnett	Xiaocong Li , Jennifer Bonnett

Course 3A	Mudit Gupta, Kathleen Wong, Li Mei	Kirsten Flynn
Course 3B	Ting Chen, Tony Ly, Weihao Choo, Yuyang Zhang	Yuyang Zhang
Course 5B	Jonathan Ng, Peter Suen, Jie Ding, Zoe Yang, WeiminXie	Jonathan Ng, Weimin Xie
Course 6A	Brnic Van Wyk, Nathan Bonarius, Su Li Sin, Richard Saverimuttu	Raymond Chow
Course 10		Wenchuan Huang (Life Insurance) Alex Leung (Investments) Belinda Ashton (Health) Raymond Chow (GRIS) Weihao Choo (General Insurance) Ai Nee Seow (ERM) Kuan Kiat Cheah (Environment) Stephen Lynch (Banking)

5. Exam Administration and Supervision

The Board of Examiners was ably assisted by a number of Institute staff, the Education Team, in particular Sarah Tedesco and Karenna Chhoeung. They were responsible for administering the entire process and ensuring key deadlines were met, compiling and formatting the examination papers, distributing material to candidates and to exam centres, processing results and collecting historical information for the production of this report. They did a great job and the Board of Examiners team is indebted to them all.

The Part III examinations were run by an external consultancy – Cliftons, a computer training venue.

Other examinations in temporary exam centres were administered by Fellows or other approved supervisors.

6. Exam Candidature

6.1. Candidate Mix

The mix of courses sat by candidates is broadly similar to that in previous years

Table 4: Candidate Mix by Part III Course

Subject	2015 (1)	2014 (2)	2014 (1)	2013 (2)	2013 (1)
Life Insurance	32%	29%	32%	20%	19%
General Insurance	37%	37%	34%	28%	32%
Investment Management & Finance	6%	9%	6%	8%	7%
Global Retirement Income Systems	5%	3%	4%	3%	4%
Enterprise Risk Management	n/a	n/a	n/a	19%	20%
Health	n/a	n/a	n/a	4%[1]	4%
Commercial Actuarial Practice	20%	23%	23%	17%	15%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

BoE Members for Semester 2 2015

1. Board of Examiners

The constitution for the Board of Examiners for next semester (semester 2 2015) is as follows:

1.1. Chair

Gary Musgrave

1.2. Chief Examiners

Course 2A: Life Insurance	Andy Siu
Course 2B: Life Insurance	Matthew Wood
Course 3A: General Insurance	Nadeem Korim
Course 3B: General Insurance	Jacob Sharff
Course 5A: Investment Management & Finance	Andrew Goddard
Course 6B: GRIS	Stephen Woods
Course 10: Commercial Actuarial Practice	Bruce Thomson

1.3. Assistant Examiners

Course 2A: Life Insurance	Alissa Holz, Bridget Browne
Course 2B: Life Insurance	Yee Lin Yang, Kirsty Hogan
Course 3A: General Insurance	Yvonne Wong, James Pettifer
Course 3B: General Insurance	Ammar Khan
Course 5A: Investment Management & Finance	Syd Bone
Course 6B: GRIS	Jim Repanis
Course 10: Commercial Actuarial Practice	Matthew Ralph

2. Examination Dates

The dates for the examinations in Semester 2 2015 are as follows:

Table 5: Examination Dates

Module	Subject	Exam Date
1 (7A – ST9)	Enterprise Risk Management	12 October
1 (STI)	Health & Care (IFoA)	7 October
1 (F101)	Health Principles(ASSA)	TBC
2 (2A)	Life Insurance	13 October
2 (3A)	General Insurance	15 October
2 (5A)	Investment Management & Finance	19 October
3 (2B)	Life Insurance	14 October
3 (3B)	General Insurance	16 October
3 (6B)	Global Retirement Income Systems	20 October
4 (10)	Commercial Actuarial Practice	21 October

3. Exam Solutions

Excluding the multiple choice questions and answers, the Board of Examiners have agreed to release this semester's examination questions only. The marking guides will be used as learning resources in Semester 2 2015.

Gary Musgrave
Chair, Board of Examiners
31 July 2015

EXAMINER REPORTS

COURSE 2A LIFE INSURANCE
Chief Examiner's Report Semester 1 2015

1. Summary

1.1. Course Overview

The aim of the 2A Life Insurance Course is to provide the market, legislative and product knowledge, along with the skills and judgment, necessary for an actuary to tackle a range of management related problems in life insurance relating to underwriting and risk management, experience analysis, assumption setting and pricing.

1.2. Assessment

The assessment model is broken down into three parts

Forum Participation	10%
Multiple Choice Exam	20%
Long Answer Question Exam	70%

This semester is the first time that these weightings have been used. Previously, the Multiple Choice Exam and Long Answer Question Exam were worth 30% and 60% respectively.

1.3. Pass Rates

67 candidates enrolled this semester. Of these, 1 withdrew and 1 was absent, leaving 65 sitting the exam.

It is proposed that 20 candidates be awarded a pass, which implies a pass rate of 31%. Table 1 shows the historical pass rates for this subject:

Table 1 – Course Experience

SEMESTER	SAT	PASSED	PASS RATE
Semester 1 2015	**65**	**20**	**31%**
Semester 2 2014	56	25	45%
Semester 1 2014	62	16	26%
Semester 2 2013	59	25	42%
Semester 1 2013	50	26	52%
Semester 2 2012	43	14	33%
Semester 1 2012	67	22	33%
Semester 2 2011	54	10	20%
Semester 1 2011	60	18	30%

The 31% pass rate for this exam is lower than the 45% pass rate for the previous exam (Semester 2 2014) and also lower than the historical average. Many candidates seemed to have a misunderstanding of basic concepts. For example, there was a widespread misconception that level premium rates are always guaranteed.

2. Assessment

2.1. Overall Performance

- Performance in the forum participation component was strong, with a pass rate of 87.9%. The forum participation component was not a good differentiator of the quality of the candidates.
- Performance in the MCQ component was weak, with a pass rate of 29.2%. The marks were bunched together in a relatively narrow band so, as with the forum participation component, the MCQs were not a particularly useful differentiator.
- For the LAQ component, there was a lack of consistency in the performance of each candidate across the three LAQs, suggesting a lack of broad understanding of the issues. For example, even the candidate ranked third overall scored grades of B,A and D respectively for the three LAQs. Very few candidates appeared strong across all areas of assessment.
- Overall performance was relatively poor. As discussed in section 2.6, numerous instances of serious misunderstandings were found in the borderline papers. There was also a widespread misconception (albeit less serious) that level premium rates are always guaranteed. This was surprising and disappointing, given that page 14 of the textbook states, in relation to level premium business:

  "In older versions of this policy, the premium varied by entry age, but once the policy had commenced, the premium was guaranteed never to increase. Modern versions of this contract allow the life company to increase the premiums in some circumstances, such as if experience for the product is worse than anticipated."
- This particular misconception could be addressed by rewording that section of the textbook, perhaps by splitting up "traditional" and "modern" level premium business into separate subsections.
- Addressing the issue of the lack of broader understanding is more challenging. One suggestion would be to have a number of assignments (perhaps 2 to 3) throughout

the semester to cover a broad range of topics, but tied to the units of the course that we would expect students to have covered by that point in time. Due to volunteer resourcing constraints, the assignments would have to be self-assessed but could be discussed at the tutorials. The intention of the assignments is to give the candidates an indication of how well they can answer a question in relation to a topic that they should have covered. Hopefully they will seek to address their areas of weakness once the weaknesses have been identified. Obviously there will be some work involved in writing the assignments and marking guides. I would suggest using, as a starting point, some of old assignment questions from before the current format of the exams was introduced, assuming the Institute has kept a copy of those.

2.2. Exam Question by Question Analysis

Table 10 – Question 1

Question 1	Total Marks: 30			
	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass (A)	22.0	73.3%	6	9%
Pass (B)	18.0	60.0%	17	26%
Slightly Below Standard (C)	16.2	54.0%	3	5%
Below Standard (D)	14.0	46.7%	19	29%
Weak (E)	9.0	30.0%	14	22%
Showed Little Knowledge (F)	1.0	3.3%	6	9%
Did Not Attempt (X)	0.0	0.0%	0	0%
Maximum Mark	25.5			
Average Mark	15.4			
Standard Deviation	5.0			
Coefficient of Variation	0.32			

Question 1 was about adding an unusual feature to a TPD product. Under this feature, where an insured person participates in sport in a professional (paid) capacity, a benefit would be payable if the insured person suffered a serious injury or a very serious injury.

This was a straight forward risk question which candidates should have found easy, but candidates did not perform particularly well on this question, with a pass rate of 35%.

Most candidates appeared to understand that this was an unusual risk with a level of anti-selection applied. However, often the answers did not show a deep or broad enough consideration of the risks around the definition as well as the target customers. The candidates also rarely connected their concerns, with the risks and then the specifics they would recommend changing. If candidates had used this process, it is likely they would have received higher marks.

Part a):

Candidates were asked to describe what aspects of the suggested product feature they would be seeking clarification on.

Though overall this was answered reasonably well, many candidates focused on sales and pricing assumptions here rather than looking to seek clarification on definition wording or target market.

Part b):

Candidates were asked to describe the major risks that they saw with the suggested product feature.

Candidates struggled with this despite some relatively easy marks being available. While many candidates mentioned risks relating to anti-selection and moral hazard, there were some obvious risks, such as the benefit being difficult to assess at claim time, that were less well covered.

Part c):

Candidates were asked to suggest modifications to the feature that they would recommend.

This part was not answered well. In particular, many candidates failed to suggest modifications to address the risks that they had identified in part (b).

Table 11 – Question 2

Question 2	**Total Marks: 60**			
	Marks Required	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	48.0	80.0%	3	5%
Pass (B)	40.0	66.7%	17	26%
Slightly Below Standard (C)	36.0	60.0%	17	26%
Below Standard (D)	30.0	50.0%	14	22%
Weak (E)	24.0	40.0%	7	11%
Showed Little Knowledge (F)	1.0	1.7%	7	11%
Did Not Attempt (X)	0.0	0.0%	0	0%
Maximum Mark	50.5			
Average Mark	35.1			
Standard Deviation	9.2			
Coefficient of Variation	0.26			

Question 2 was about pricing a level premium funeral insurance product which automatically becomes paid-up after 15 years.

Candidates were able to score a high number of marks, particularly for the spreadsheet question, as the mark allocation was generous. The pass mark was therefore increased accordingly.

The pass rate under the revised pass mark is 31%, which is a better reflection of the quality of the attempts than the original pass rate of 69.7% under the Markers' original pass mark.

Part a):

Candidates were asked to comment on the reasonableness of a number of assumptions in the pricing basis.

Markers' comments:

Most students recognised the risk of anti-selection due to lack of underwriting, but were not able to point out that anti-selection will wear off over time. Students also failed to point out that there would be additional anti-selection arising from smokers taking out the policy as the rates were not differentiated by smoker status.

Most students did not recognise the high marketing costs, set up costs and admin costs for Direct Marketing products, and stated that the low expense assumption was reasonable. Many students mentioned that expense inflation should be modelled, half a mark was only given if they gave reasonable justification for doing so. Curiously some students commented that it was OK to ignore expense inflation because the benefits weren't indexed.

Not many students pointed out that cancellation rates after 15 years will be zero given the paid up nature of the policy.

Part b):

Candidates were asked to calculate a level premium payable for the policy, given a specified pricing basis.

Markers' comments:

In general the number marks available for this question was quite generous and most students scored reasonably well by demonstrating the ability to set up a basic projection and determine profit and premium based on this given a defined reserving basis. We believe the weighting of the marks within each subsection may have given too many marks for straight forward points which most students could do for example – incorporating the reserve calculation, determining transfers. It is noted that there were still some students who could not do the basic calculations.

When asked to state and justify assumptions, most students only stated but did not justify the assumptions used. This is disappointing given the question clearly asked for justification.

The majority of the students have assumed that the mortality of the insured lives were independent, but were not able to incorporate into the modelling correctly. Some students gave reasonable explanations on what independent mortality meant and several gave reasonable discussion as to why they believed the likelihood of death was not truly independent for family in practice.

Part c):

Candidates were asked to respond, and justify the reasoning to their response, to an assertion that higher policy cancellations generally mean that higher premiums are required to recoup initial expenses and pay for higher future claims.

Markers' comments:

The average mark for this part of the question was quite low. Most students seemed to miss the point of this question, preferring to comment on the need to investigate reasons for high lapses and giving reasons for potential high lapses without really commenting on the key point of the question. The poor responses could indicate lack of understanding of or confusion over what was really being asked. The question was reasonably clear in our opinion.

Less than half of the students pointed out that that the funeral plan is lapse funded, and that cancellations in the first 15 years are financially favourable for the Life Insurance

company.

Table 12 – Question 3

Question 3	**Total Marks: 30**			
	Marks Required	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	22.0	73.3%	8	12%
Pass (B)	19.0	63.3%	9	14%
Slightly Below Standard (C)	17.1	57.0%	7	11%
Below Standard (D)	12.0	40.0%	22	34%
Weak (E)	10.0	33.3%	13	20%
Showed Little Knowledge (F)	1.0	3.3%	6	9%
Did Not Attempt (X)	0.0	0.0%	0	0%
Maximum Mark	27.5			
Average Mark	15.2			
Standard Deviation	5.2			
Coefficient of Variation	0.34			

Question 3 was a broad question which covered a different topic in each of its three parts.

The pass rate under the Markers' initial pass mark was 57.6%. On reviewing the initial borderline papers, the Examiners were of the opinion that the pass mark needed to be adjusted to better reflect the standard of response to be expected from candidates considered "fit to practise". There were numerous instances of serious misunderstandings in the initial batch of borderline candidates reviewed, suggesting that many of the initial borderline candidates should have been clear fails rather than borderlines. The pass mark was therefore adjusted accordingly.

Part a):

Candidates were asked to describe and explain the reasons for the different lapse patterns between YRT and participating whole of life policies.

This part was not particularly well answered, particularly in relation to how the lapse rates for the two products would differ at short durations compared to long durations.

Part b):

Candidates were asked to comment on why an insurer might offer 5-yearly stepped and 1-yearly stepped policies, and explain why the sum of the premiums payable over 5 years is different under the two premium structures.

This part was also not particularly well answered. There was a widespread misconception that a 5-yearly stepped premium meant that premium rates were guaranteed for 5 years, and some candidates struggled with basic concepts such as time value of money.

Part c):

Candidates were asked to discuss the relative merits of adviser commissions versus fees for service.

This part was better answered, with most candidates being able to articulate some pros and cons for each. The question was topical in light of the debate in the industry following the release of the Trowbridge report. While the Trowbridge report was not examinable, marks were available for relevant points from the report, but only a few candidates touched on Trowbridge, which suggests a generally low level of awareness of current industry issues.

COURSE 2B LIFE INSURANCE
Chief Examiner's Report Semester 1 2015

3. Summary

3.1. Course Overview

The aim of the 2B Life Insurance Course is to provide the knowledge, skills and judgment necessary for an actuary to tackle a range of management related problems in life insurance relating to valuation techniques, capital management profit analysis, valuation of a company, reporting of results and professionalism.

3.2. Assessment

The assessment model is broken down into three parts

Forum Participation	10%
Multiple Choice Exam	20%
Long Answer Question Exam	70%

3.3. Pass Rates

59 candidates enrolled this semester. Of these, 2 withdrew, 1 did not present the LAQ component and 3 did not present, leaving 53 sitting the exam.

It is proposed that 21 candidates be awarded a pass, which implies a pass rate of 40% Table 1 shows the historical pass rates for this subject:

Table 1 – Course Experience

SEMESTER	SAT	PASSED	PASS RATE
Semester 1 2015	**53**	**21**	**40%**
Semester 2 2014	51	20	39%
Semester 1 2014	60	22	37%
Semester 2 2013	44	17	39%
Semester 1 2013	43	11	26%
Semester 2 2012	43	17	40%
Semester 1 2012	52	13	25%
Semester 2 2011	41	6	15%
Semester 1 2011	41	16	39%

The 40% pass rate for this exam is higher than the 39% pass rate for the previous exam (Semester 2 2014) and above the historical average. While there were a number of strong candidates who were able to apply their knowledge to the question, a number of other candidates did not.

This semester saw a change to the long answer component to contain three questions. On the whole, candidates appeared to manage their time fairly well.

3.4. Overall Performance

The quality of the submissions to the Forum was generally very high but is still surprising to see some students who do not meet minimum standards. It would seem foolish to throw away these marks as in some cases can mean the difference between passing and failing.

The MCQs should have been reasonably straightforward, so this distribution of marks, while better than last semester, is disappointing.

The LAQs contained less spreadsheet work than last semester and more components requiring complex judgement. This made the questions far better discriminators, in particular, when assessing the borderline candidates.

The performance in the LAQs was variable – indicating that they were excellent discriminators of performance. Some candidates performed very well on one or two of the questions but performed badly on the others – lack of time does not appear to be the reason for this. This could be an indication that students are not ensuring that they have good knowledge of the entire course and are instead focussing on certain areas.

It was pleasing to observe some evidence of planning. I provided my tips on exam techniques session again at one of the tutorials and a number of papers demonstrated good structure and logic suggesting some planning went into the answers.

3.5. Exam Question by Question Analysis

Table 10 – Question 1

Total Marks: **44**

Weighted Marks: **51.3**

	Marks Required	Weighed Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	29.0	33.8	65.9%	6	11%
Pass	23.0	26.8	52.3%	13	23%
Slightly Below Standard	20.7	24.2	47.0%	6	11%
Below Standard	16.0	18.7	36.4%	15	26%
Weak	9.0	10.5	20.5%	10	18%
Showed Little Knowledge	1.0	1.2	2.3%	3	5%
Did Not Attempt	0.0	0.0	0.0%	4	7%
Maximum Mark	38.0	44.3			
Average Mark	19.0	22.2			
Standard Deviation	8.9	10.4			
Co-efficient of Variation	0.47	0.5			

This was a fairly spreadsheet intensive question focusing on MoS profit methodology, VIF and target capital calculations for a book of level premium term business, projecting forward cashflows and commenting on the patterns. The quality of the answers was variable – indicating that this question was a good discriminator.

The performance for each part can be summarised as follows:

a) i) A number of students did not get the correct PVPM – taking it as being minus BEL as though this was an new business projection. Students should read the question carefully and mark down the information given in the question as they may have missed the PL that was given in the question.

a ii) Many students who got the correct answer of claims as the carrier didn't go on to explain why having claims as the carrier is preferable for a level premium product. Also many students left out putting in a profit margin. A number of students said that claims was the appropriate carrier because they are paid later in the year than when premiums are received, which is not the intent of the "relative timing" component of LPS340.

a iii) Students usually gave the correct premiums but gave the wrong number for profit. Also many students didn't include premiums for the next 10 years after the first 10 years.

Some students seemed to over-complicate things by calculating the profit as the cashflows less change in policy liability, instead of just the carrier times the profit margin.

b) i) Most students correctly calculated the Target Capital requirement and the VIF.

b ii) Some students didn't provide a correct numerical answer for the impact of target capital on VIF but many students did give a reasonable explanation on why the outcome is unusual. Some students determined the numerical impact as the NPV of the working capital, instead of using the "Y/N" switch provided in the spreadsheet.

b iii) Students generally did well in projecting forward the VIF and commenting on the pattern.

iv) Some students didn't attempt this question and others didn't give very convincing answers. However, it was encouraging so that there were some students who thought outside of the box and gave answers such as saying that it does not comply with APRA's capital standards or mentioned that it did not include other risk components such as lapse and market risk, etc.

c) Many students provided answers on the lapse impact on cashflows, however, many left out the impact on the policy liability, which was actually the main impact on profit. Some students didn't determine the impact on the current profit margin (and talked about the effect on the NPV's of the cashflows) instead of focusing on the profit impact in the 2018 year.

Table 11 – Question 2

Total Marks: **40**

Weighted Marks: **46.7**

	Marks Required	Weighed Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	24.5	28.6	61.3%	5	9%
Pass	20.5	23.9	51.3%	15	26%
Slightly Below Standard	18.6	21.6	46.4%	11	19%
Below Standard	14.0	16.3	35.0%	16	28%
Weak	10.5	12.3	26.3%	5	9%
Showed Little Knowledge	1.0	1.2	2.5%	1	2%
Did Not Attempt	0.0	0.0	0.0%	4	7%
Maximum Mark	26.8	31.2			
Average Mark	17.7	20.7			
Standard Deviation	6.5	7.6			
Co-efficient of Variation	0.37	0.4			

This question explored the interaction between a rapidly growing disability income portfolio, coupled with poor claims experience with management actions and capital implications and management. The quality of the answers was variable – indicating that this question was a good discriminator.

The performance for each part can be summarised as follows:

a) This part was generally well attempted with most candidates being able to identify that liability has increased due to change in interest rate movement.

Some students misinterpreted the question as asking for 'possible' reasons for the increase (e.g. raising possible strengthening of assumptions, or higher IBNR delays assumed in the valuation), and so listed these out briefly.

Most students produced their answer in an e-mail structure and with language appropriate to the purpose so the vast majority of students scored this drafting mark.

A few students were confused by the phrase "disabled lives policy liabilities" and interpreted this as the policy liabilities for the DI product overall (i.e. the Active Lives Reserve + Disabled Lives Reserve).

b) Most students provided at least 2 valid points, but most struggled to raise more than 5 valid points.

Some students provided reasons that were too generic (e.g. acknowledging the RBNA assumption / reserve needed to be amended / would change, but not describing how, or even giving a direction of changes expected).

Most candidates provided comments that reflected that they understood how a reduction in decline rates will impact size of IBNR and RBNA, and increase in termination will reduce DLR. However they did not pick up the implications that the targets will have on the behaviour on the claim assessors.

Only a few candidates included declining legitimate claims incorrectly or terminating claims too early leading to more dispute claim reserves and reopen claims respectively in their answers.

c) i) Most students provided at least 3 valid points, but most struggled to raise more than 5 valid points.

While most students mentioned asset/liability mismatch and decreasing claim profitability, many students didn't mention other obvious points at all (such as capital impacts).

c ii) Most students provided at least 4 valid points with advantages/ disadvantages, but most struggled to raise more than 6 valid points (to get full marks 10 separate points were required). Reinsurance and capital injection from the parent were the most common points raised followed by re-pricing and product changes.

Some students raised points that were inconsistent with the question (e.g. stating "reduce dividends" when the question states none have been paid for some years).

Table 12 – Question 3

Total Marks: **36**

Weighted Marks: **42.0**

	Marks Required	Weighed Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	30.5	35.6	84.7%	4	7%
Pass	23.5	27.4	65.3%	16	28%
Slightly Below Standard	21.1	24.6	58.5%	5	9%
Below Standard	17.5	20.4	48.6%	10	18%
Weak	10.0	11.7	27.8%	13	23%
Showed Little Knowledge	1.0	1.2	2.8%	4	7%
Did Not Attempt	0.0	0.0	0.0%	5	9%
Maximum Mark	33.5	39.1			
Average Mark	18.4	21.5			
Standard Deviation	8.7	10.2			
Co-efficient of Variation	0.47	0.6			

- This question explored the implications arising from an error discovered where certain historical cashflows had been mis-assigned between non-participating and participating business. Part a) was a fairly straightforward participating business policy liability calculation. Part b) required candidates to draft a Board paper setting out the implications and recommendations arising from this error.
- The quality of the answers was variable – indicating that this question was a good discriminator.
- The performance for each part can be summarised as follows:

a) Overall this part was reasonably well answered by most candidates, with over 40% of the candidates scoring 2.5 marks or more out of 4.

Some common mistakes included:

- Failure to recognise that the difference between VSA and PL represents both PH bonus and SH profit margins;
- Incorrect use of prior year (2013) declared bonus to subtract from 2014 roll-forwarded VSA to derive the PL;

- No clear explanation or reasoning for why the particular bonus rate was chosen; and
- Performing of the calculation on all three bonus rate levels without specifying the correct answer.

b) This part was not as well answered considering there was a wide range of valid answers which the candidate could score points from.

Despite most candidates adopting the board memo format, answers were not well structured, with many candidates bundling issues and recommendations together and not making a clear distinction.

Some candidates did not explain well enough some of the major issues, i.e. why it is an issue and what the impacts of the issue are. Candidates generally scored points for discussions on risk management and control, reputation, Par and Non-Par profitability and equity between generations of policyholders.

However, there were also some extreme suggestions such as recommending to split Par and non-Par into different statutory funds or completely close to new business.

COURSE 3A GENERAL INSURANCE
Chief Examiner's Report Semester 1 2015

4. Summary

4.1. Course Overview

The aim of the 3A General Insurance Course is to provide the knowledge, skills and judgment necessary for an actuary to tackle a range of problems in general insurance relating to products, accident compensation schemes, valuation techniques, accounting and management information.

4.2. Assessment

The assessment model is broken down into three parts

Forum Participation	10%
Multiple Choice Exam	20%
Long Answer Question Exam	70%

4.3. Pass Rates

98 candidates enrolled this semester. Of these, 8 withdrew and 7 did not present, leaving 83 sitting the exam.

It is proposed that 28 candidates be awarded a pass, which implies a pass rate of 31% Table 1 shows the historical pass rates for this subject:

SEMESTER	SAT	PASSED	PASS RATE
Semester 1 2015	**90**	**28**	**31%**
Semester 2 2014	76	15	20%
Semester 1 2014	66	17	26%
Semester 2 2013	76	14	18%
Semester 1 2013	96	31	32%
Semester 2 2012	96	29	30%
Semester 1 2012	103	29	28%
Semester 2 2011	78	18	23%
Semester 1 2011	76	24	33%

- The 31% pass rate represents a material improvement from the previous exam (Semester 2 2014) and is higher than the historical average of the pass rates from the above table. Although the pass rate increased this semester, we continue to see candidates demonstrate a lack of practical knowledge on key valuation techniques such as the PPCF valuation model.

4.4. Overall Performance

- Overall, the performance of students improved from last semester. Some possible drivers of this improvement are likely to be:
  - More experienced students sitting the exam this semester following from the poor pass rate observed last semester.
  - Students acknowledging the poor pass rate from last semester's and responding with increased effort at preparing for the exam this semester.
  - A tutorial by the chief examiner going through last semester exam paper in detail and explaining in greater detail the expectations for students to be able to pass this exam
- Although the pass rate increased this semester, this pass rate is still low. Key observations on the candidate's performance this semester are:
- Students again demonstrated an inadequate understanding of important and basic valuation models such as the PPCF. This model has been continually tested since 2012 and yet students are still not able to adequately use it.
- Students showed an inability to qualitatively discuss the impact of scheme reforms. In the view of the examiners this is connected to the point above as an understanding of the mechanics of valuation models is required to understand the impact of scheme reforms.
- Students continue to struggle with more complex reserving analysis. E.g. many students this semester were not able to make a sensible attempt at undertaking an analysis of surplus which is a key validation tool in assessing the reasonableness of reserve.
- Students did not demonstrate a good understanding of how to undertake risk margin analysis using simple statistics. This is of concern given the need to be able to undertake this analysis in capital modeling which is a core component of course 3B.

4.5. Exam Question by Question Analysis

Question 1 **Total Marks: 40**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	26.0	65.0%	3	3%
Pass	18.0	45.0%	27	30%
Slightly Below Standard	17.0	42.5%	5	6%
Below Standard	14.0	35.0%	17	19%
Weak	5.0	12.5%	27	30%
Showed Little Knowledge	1.0	2.5%	4	4%
Did Not Attempt	0.0	0.0%	7	8%

Maximum Mark	27.5
Average Mark	14.0
Standard Deviation	7.0
Co-efficient of Variation	0.50

- Candidates performed adequately on this question, with a pass rate of 33%.
- This question was asking students to assist a client with the assessment of the feasibility of undertaking self-insurance. The main valuation model being tested was the PPAC which is a key actuarial reserving model. Students were asked to perform gross up analysis, perform a PPAC analysis and consider the impacts of potential scheme reforms.

Part (a): Many candidates were not sufficiently familiar with the PPAC projection technique. When applying ratios to gross up the latest diagonal, it was important to think about the timing of the ratios created. A ratio derived from the previous accident year would, at that point in time, be one development year younger, and hence should be applied accordingly to the current accident year. A mark was available for demonstrating knowledge of what the active claims were at June 2015. This required candidates to sum the leading diagonal of their revised active claims triangle (or present the equivalent vector labeled as such).

Few candidates thought about the fact that the triangle was not mature. Marks were available where candidates applied an appropriate tail.

Part (b): There were marks for weighted averages. No marks were awarded for simple averages. Where candidates used a single, complex, Offset formulae, several made mistakes and lost marks accordingly. It is worth noting that:

- there are only a few cells that require calculation;
- this work will not have to be updated, so there is little point spending time automating or over-engineering formulae;
- marks are often available for intermediate steps;
- the marker has to 'unwind' your formulae to assess what has been done, which is more difficult if complex formulae were used;
- Simple formulae with clearly laid out steps are usually quicker to implement and sense check under exam conditions.

Where payments (in the PPAC triangle) are trending upwards, it is appropriate to allow for that trend or select a payment at least as high as the highest most recent value. Selections simply linking to weighted averages did not allow for the trends observed in the data and did not earn full marks.

Very few candidates analysed and discussed super-imposed inflation. Applying an arbitrary number from one's general knowledge did not earn marks because the data was available for analysis and the actual value should have been derived and used (or at least referred to).

Part (c): It's very important to read the question and think about what the examiner is looking to test. This question specifically stated "Based on your results from (b)…". Many candidates chose to ignore this request and instead bulleted rote-learned generic points relevant for any valuation. Marks were awarded where candidate answers derived questions / investigations around what they had observed in parts (a) and (b).

Part (d): This part was more complex in that it required students to realise that run-off liabilities would remain with the current insurer. The 'key' words in the question were 'calendar years', which helped many candidates realise that the examiner was looking for an explanation on payments in 'diagonals' (calendar years) vs. that in 'rows' (accident periods). This was relevant because WoolMers would be liable for only part of the diagonal of payments from the time it commenced self-insurance.

Part (e): (i): Candidate answers needed to demonstrate a clear choice of either adjusting their assessment, or not. Marks were not awarded where candidates avoided the question and did not choose, but instead described benefits or reasons for doing both options.

Part (e): (ii): The question's key words were "how would you adjust your valuation…", "…including,…*direction of change*…*and*….justification". Many candidates did not make the link that the examiner was still looking to test further their knowledge of the PPAC technique. This technique uses continuance rates, active claims, and payments per active claim. When describing how you would adjust your valuation, better candidates linked their answers to tweaking these key drivers of their PPAC projection. Several candidates preferred to discuss terms from techniques that they're more familiar with, including average claim sizes, claims frequency and claims severity. However, the examiner was testing knowledge of the PPAC projection technique and marks were awarded where candidates described how they would adjust features relating to their PPAC projection.

Many candidates were brief on question part e(ii), or at least provided the same volume of narrative as they did for question part e(i). It is good exam technique to weight time and effort according to the volume of marks available, and to use that as a guide to the level of depth that the examiner is looking for in candidate answers.

Question 2 **Total Marks: 40**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	21.0	52.5%	6	7%
Pass	16.0	40.0%	9	10%
Slightly Below Standard	14.4	36.0%	6	7%
Below Standard	9.0	22.5%	40	44%
Weak	6.0	15.0%	13	14%
Showed Little Knowledge	1.0	2.5%	7	8%
Did Not Attempt	0.0	0.0%	9	10%

Maximum Mark	24.3
Average Mark	10.7
Standard Deviation	5.8
Co-efficient of Variation	0.54

This question was in relation to the calculation of risk margins in a discretionary risk fund which wrote long tailed business. The key themes in this question were to demonstrate an understanding of risk margins including completing a calculation of a diversified risk margin as well as an understanding of the regulations of risk margins and the processes around validating the results. Overall, the question was extremely poorly answered with most students struggling on the large calculation part of the question.

Part a):

This part of the question was fundamentally bookwork and was generally well answered. At the core of the question was to demonstrate an understanding of the difference in the requirements of risk margins between AASB 1023 and the APRA GPS 320. The majority of candidates were able to provide a decent attempt at this question and achieved at least one of the marks on offer. The average mark for part a) was 1.28/2

Part b):

This part of the question related around the three key risk types typically incorporated in a risk margin estimate and asked for the candidates to identify which would provide the largest source of uncertainty with examples and justification. Very few candidates were able to recognise that the key uncertainty for the valuation would come from the fact that

the company wrote long tailed business and only had been in existence for 3 years. The average mark for part b) was 0.82/2.

Part c):

This part of the question required the candidate to calculate the diversified risk margin for the overall portfolio. This required the calculation of the undiversified risk margin for each of the portfolios, calculating a diversification benefit and then applying this to each portfolio as well as in total. Overall the question was very poorly answered with a large number of candidates not being able to follow through the steps required to calculate a diversified risk margin. The following key points were handled poorly by most students

- Very few students allowed for any risk margin other than that coming directly from the simulation of results
- Many students used the mean of the simulation result as the central estimate
- Very few students applied the diversification benefit back to the individual class risk margins as required by GPS 320
- Many students did not complete the analysis by class

The average mark for this part was 2/10.

Part d):

This part of the question required the candidate to go about validating the overall risk margin from c) and in particular asked if there were validations that would normally be performed which may not be relevant in this specific case. Generally most candidates could identify that industry benchmarks would be a starting point. Few candidates addressed the part of the question around which validations would not be relevant and few of those were able to recognise that last year's results are not directly comparable. The average mark for this part was 0.9/2.

Part e):

This part of the question required the candidate to deal with a situation where a very large claim is reported after the valuation date. Overall, most students who attempted the question were able to cover off the need to comment on the materiality of the claim in the valuation report but few also commented that if time permitted that analysis should be completed as to the impact of the event. The average mark for this part was 0.9/2.

Question 3 **Total Marks: 40**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	30.0	75.0%	9	10%
Pass	25.0	62.5%	20	22%
Slightly Below Standard	22.5	56.3%	9	10%

Below Standard	19.0	47.5%	13	14%
Weak	15.0	37.5%	17	19%
Showed Little Knowledge	1.0	2.5%	14	16%
Did Not Attempt	0.0	0.0%	8	9%

Maximum Mark	35.0
Average Mark	19.7
Standard Deviation	8.8
Co-efficient of Variation	0.45

The question concerned an actuary about to undertake a CTP valuation, but has been confronted with an increase in claims reported, finalised, and payments since the previous valuation, that coincides with a legislation change due to mandatory dashcams. Candidates had to perform an PPCF in operational time (OT) valuation process using data provided and react appropriately to the experience. 12.5 out of 20 marks related to technical work.

Part a):

This part of the question required candidates to compare actual vs expected claims finalised and payments on finalisation from the previous valuation. It was well attempted and very simple, but several candidates lost marks for (seemingly) deliberately excluding the most recent accident year from their expected figures, despite it being clearly required from the table. A small proportion lost marks for not recognising the potential payment delay between settlement date and finalisation date for their actual numbers. The average mark for this part was 2.3/3.

Part b):

This part of the question required candidates to list and explain one advantage and one disadvantage, given the situation of the question, of applying superimposed inflation to a real time PPCF model to react to the increased finalisations and payments observed in the data. Most candidates identified that SI was an easy approach and scored full marks for the advantage. However, many did not adequately explain the disadvantage, failing to make an explicit connection to the valuation process or outstanding claims liabilities. The average mark for this part was 1.3/2.

Part c):

This part of the question required candidates to explain the suitability of the PPCF in operational time model and the key assumptions underlying the model. Most candidates identified the need for the operational time model due to the change in finalisation and the need for invariant ordering of finalisations, but most missed the assumption of a fixed

rate of finalisation. Some marks were awarded for a range of other assumptions that apply to PPCF models in general. The average mark for this part was 2.4/4.

Part d):

This part of the question had four parts, which stepped the candidate through the process of obtaining the outstanding claims estimate using the OT PPCF model provided. Several candidates did not understand or review the provided tables thoroughly and would perform unnecessary calculations. Others were unable to adapt and depart from the uniform OT band models of the textbook, and lost marks for deviating from the question.

- Part i) of d) required candidates to select future development operational time bands that reflected the impact of dashboards, and justify their selection. We considered this to be quite straightforward but the vast majority of candidates struggled to justify their selections appropriately.

- Part ii) of d) required candidates to use create triangles of cumulative claims finalised and payments matching to the operational time bands selected in i). Again this was considered quite straightforward as it merely required linking to the appropriate cells in tables provided, but many candidates made technical errors or did not read the question correctly and projected numbers for future OT periods.

- Part iii) of d) required candidates to select appropriate OT PPCF factors, allowing for tail assumptions, and to justify their selections. Most candidates selected reasonable factors and justified their selection appropriately (it was generally quite easy to justify as the PPCF factors were stable).

- Part iv) of d) required candidates to project the outstanding claims liability and state a reasonableness check. It was straightforward and reasonably well-attempted.

The average mark for this part was 3.4/7.

Part e):

This part of the question required candidates to perform an analysis of change to reconcile the current valuation to the previous valuation. This part was poorly attempted, with only 29 out of the 81 candidates scoring more than zero, despite it being quite easy to score quick marks for linking in the central estimate for the most recent accident year. Only two candidates knew how to properly flow through the impact of claims experience on the previous model – many candidates interpreted this incorrectly and would instead repeat the actual vs expected payments step. Overall it seemed that most candidates did not know how to perform the analysis correctly.

The average mark for this part was 0.5/4.

COURSE 3B GENERAL INSURANCE
Chief Examiner's Report Semester 1 2015

5. Summary

5.1. Course Overview

The aim of the 3B General Insurance Course is to provide the knowledge, skills and judgment necessary for an actuary to tackle a range of management related problems in general insurance relating to the pricing of all general insurance products, as well as capital management and financial condition reporting.

5.2. Assessment

The assessment model is broken down into three parts

Forum Participation	10%
Multiple Choice Exam (MCQ)	20%
Long Answer Question (LAQ) Exam	70%

5.3. Pass Rates

61 candidates enrolled this semester. Of these, 6 withdrew and 1 did not present, leaving 54 sitting the exam.

It is proposed that 20 candidates be awarded a pass, which implies a pass rate of 37%. Table 1 shows the historical pass rates for this subject:

Table 1 – Course Experience

SEMESTER	SAT	PASSED	PASS RATE
Semester 1 2015	**54**	**20**	**37%**
Semester 2 2014	63	23	37%
Semester 1 2014	61	16	26%
Semester 2 2013	64	17	27%
Semester 1 2013	62	22	35%
Semester 2 2012	69	26	38%
Semester 1 2012	71	27	38%
Semester 2 2011	65	20	31%
Semester 1 2011	58	20	34%
Semester 2 2010	53	21	40%
Semester 1 2010	53	21	40%

The 37% pass rate for this exam is in line with the previous exam (Semester 2, 2014) and in line with historic average since 2010. Candidates who marginally failed seemed to show some knowledge but either struggled with explaining key concepts or struggled with time management on calculation questions.

This semester the weighting of the MCQ exam was reduced from 30% to 20% whilst the LAQ exam weighting was increased from 60% to 70%. The number of questions in the LAQ exam was increased from two to three, allowing for a greater range of topics to be examined.

5.4. Overall Performance

- The marks for this semester were similar to last semester reflecting comparable difficulty and length of the exam.
- The highest mark was 133.8, which is down on last year's 149.3
- Student marks on MCQs were quite bunched together with the highest mark being 46/67, the average being 33.5/67 and standard deviation of 6.6/67. The resulting pass rate of 56% for MCQs was pleasing.
- Online participation mark average 8/10 was higher than last semester's. The 14% increase in percentage of people getting 9/10 or better was pleasing. Students have been encouraged not only to participate in the current forum, but also to use previous forums as a learning resource.
- For LAQs, students tended to struggle with some of the calculations but provided shortcuts and explanations of what they would have done given more time – this was a pleasing outcome as it was able to differentiate students who demonstrated understanding but just didn't have enough time compared to students who did not demonstrate understanding.

  Specific issues relating to each exam section are discussed below.

Long answer questions below denote the sum of the original marker marks. Overall these were scaled by a factor of 70/73 to allow for 70% weighting.

Long Answer Question 1 **Total Marks: 62**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	44.0	71.0%	3	6%
Pass	38.0	61.3%	24	44%
Slightly Below Standard	34.2	55.2%	13	24%
Below Standard	24.0	38.7%	14	26%
Weak	16.0	25.8%	0	0%
Showed Little Knowledge	1.0	1.6%	0	0%
Did Not Attempt	0.0	0.0%	0	0%

Maximum Mark	48.0
Average Mark	37.3
Standard Deviation	4.7
Co-efficient of Variation	0.13

The pass rate for LAQ1 was 50% so this question was well answered.

The question was relatively straight forward so was challenging to differentiate the quality of students, with the better students (A's) easy to identify, but there are many between B's and C's.

Despite being a straight forward question, it was challenging to get full marks as there are many points to list.

Parts a, b, d and e were the most straight forward and students scored well.

Part c was also answered well, with the best students mentioning profit history and net/gross relationship to understand reinsurance.

In part f, most students did well but did not put enough points to score full marks (3 marks required 6 points to be listed).

The better students in parts i, j and l went into greater discussion detail for example:

- part i: UFIs may have lower chance of paying up but there can be mitigation measures such as…
- part j: good that new modelling is mentioned given the new data and more costly RI, but the better students discussed impacts on return on capital
- part l: in terms of levy options the better students gave recommendations as well as implications on society/insureds

Long Answer Question 2 **Total Marks: 48**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	38.0	79.2%	1	2%
Pass	32.0	66.7%	12	22%
Slightly Below Standard	28.7	59.8%	14	26%
Below Standard	23.0	47.9%	14	26%
Weak	19.0	39.6%	9	17%
Showed Little Knowledge	1.0	2.1%	4	7%
Did Not Attempt	0.0	0.0%	0	0%

Maximum Mark	38.0
Average Mark	27.6
Standard Deviation	6.1
Co-efficient of Variation	0.22

The pass rate for LAQ2 was 24%.

Many "book work" parts were answered well (e.g. part a, c and d) however part b was disappointing as it asked the role of the board in regards to FCR which should have been a straight-forward book work question as well.

Part e was also a book work question in calculation format. This provided some common mistakes in the calculation of the ICRC, such as assuming the other perils was other accumulations (no marks were reduced for the mistaken identity), and not properly applying the premium liability offset (some students took it off the vertical requirement, whilst most people did not take it into account at all).

Part g was well attempted. A common mistake was using original dollars instead of inflated dollars to come up with assumptions.

Time seemed to be an issue for part h where there were 7 marks devoted to the question, yet most students scored less than half of the available marks. Students should take heed the need to allow proportionate time for questions during the planning phase of the exam. The students who appeared to have invested the time into the calculation were rewarded appropriately high marks. Nearly all students put their response to the AA in this question in memo format, thereby gaining immediate easy marks.

Long Answer Question 3 **Total Marks: 36**

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	21.0	58.3%	4	7%
Pass	17.0	47.2%	15	28%
Slightly Below Standard	15.3	42.5%	2	4%
Below Standard	9.0	25.0%	25	46%
Weak	5.0	13.9%	6	11%
Showed Little Knowledge	1.0	2.8%	2	4%
Did Not Attempt	0.0	0.0%	0	0%

Maximum Mark	22.3
Average Mark	14.1
Standard Deviation	4.6
Co-efficient of Variation	0.33

The pass rate for LAQ3 was 35%.

Overall, it was students appear to struggle with time for this question, which is somewhat reflected in the pass rate.

Part a: Generally this question was well answered by students. Most students managed to pick up that allocation to business unit would allow for better understanding of costs, allow them to manage risk, assess performance and set future performance targets.

Part b: This question involved slightly complex calculations. Most students managed to calculate premium based on exposure but many struggled to calculate premium based on experience. Some of the shortfalls included not allowing for the insurance program, calculating retention instead of ceded risk and not explicitly considering experience across multiple years. Almost no students considered capping the Workers Compensation claims experience.

Part c: Generally, students were able to identify issues with using exposure only to calculate premiums but struggled to identify issues with using experience only to calculate premiums. Some students also struggled to provide reasonable solutions to mitigate this issue.

d) Many students did not interpret this question in the manner expected. The key shortcomings were around identifying differences in the exposure and experience methods, identifying a way to adopt both methods to calculate premiums and highlighting the pros and cons with the suggested method including heightened interest from business units with the potential for some business units to feel like they are being mistreated.

COURSE 5B INVESTMENT MANAGEMENT AND FINANCE
Chief Examiner's Report Semester 1 2015

6. Summary

6.1. Course Overview

The aim of the 5B Investment Management and Finance Course is to provide the knowledge, skills and judgment necessary for an actuary to tackle a range of problems relating to the use of derivative securities and the pricing and modelling frameworks for derivative securities including exotic options. The course also equips candidates with an understanding of interest rate derivatives, capital and risk management. The importance of professionalism is also emphasised in the course.

6.2. Assessment

The assessment model is broken down into three parts

Forum Participation	10%
Multiple Choice Exam	20%
Long Answer Question Exam	70%

6.3. Pass Rates

30 candidates enrolled this semester. Of these, 3 withdrew and 3 did not present, leaving 24 sitting the exam.

It is proposed that 15 candidates be awarded a pass, which implies a pass rate of 63%. Table 1 shows the historical pass rates for this subject:

Table 1 – Course Experience

SEMESTER	SAT	PASSED	PASS RATE
Semester 1 2015	**24**	**15**	**63%**
C5A Semester 2 2014	32	17	53%
C5B Semester 1 2014	24	7	29%
C5A Semester 2 2013	41	21	51%
C5B Semester 1 2013	37	21	57%
C5A Semester 2 2012	30	17	57%
C5B Semester 1 2012	22	13	59%

C5A Semester 2 2011	26	16	62%
C5B Semester 1 2011	16	6	38%

The 63% pass rate for this exam higher than last year and similar to 2012 and 2013. There was a clear gap between candidates who demonstrated a good understanding of the course material and ability to present logical arguments and use judgement and those who are yet to reach this level of achievement.

6.4. Overall Performance

Overall the performance was good. There was a clear gap between the candidates who have been recommended for a passing grade and those who have failed. Candidates who failed did not demonstrate a good understanding of the course in the examination. The performance on the first two questions of the exam was better than on Question 3. This was because Question 3 was more difficult and tested some difficult ideas that require careful study in addition to use of judgement. These difficult concepts are covered well in the course material but could be a greater focus in the tutorial program in future. The multiple choice questions were difficult. There was active participation throughout the course on the online forum by the majority of candidates.

6.5. Exam Question by Question Analysis

Table 10 – Question 1

Question 1	**Total Marks: 40**			
	Marks Required	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	28.0	70.0%	3	13%
Pass (B)	20.0	50.0%	12	50%
Slightly Below Standard (C)	18.0	45.0%	0	0%
Weak (D)	16.0	40.0%	4	17%
Showed Little Knowledge (E)	8.0	20.0%	5	21%
Did Not Attempt (X)	1.0	2.5%	0	0%
Maximum Mark	32.0			
Average Mark	20.4			
Standard Deviation	5.6			
Coefficient of Variation	0.28			

Candidates performed reasonably well on this question, with a pass rate of 63%.

Part a):

Candidates were asked to explain the difference between two particular exotic options and to relate this understanding to a new context given in the question.

This was well handled by many. Some candidates who did not perform as well on this part lacked sufficient precision in their answer or struggled to connect their definitions of options to the context given in the question.

Part b):

Candidates were asked to discuss the use of Excel and other software/programming

languages in the derivation of the value of a gold-linked bond price.

Some candidates answered this well while others struggled to suggest some of the challenges with using spreadsheet packages for this type of complex valuation problem.

Part c):

Candidates were asked to explain the use of a hybrid of analytical and numerical methods for the valuation of a bond with option features. This was a difficult part.

The importance of reading the question was highlighted here. Some candidates lost quite a number of marks because they only talked about numerical methods or because they only attempted to derive an analytical approach to the problem. The question clearly asked for a hybrid approach and it was unfortunate that some of the less well performing candidates ignored this request.

Part d):

Candidates were asked to compare two approaches to the valuation of a risky corporate bond.

This proved a good discriminator with some candidates able to identify issues with the risk-neutral approach to this problem while others ignored the 'risky' part of the question and chose to answer a much simpler problem. This approach did not earn marks.

Table 11 – Question 2

Question 2	**Total Marks: 40**			
	Marks Required	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	32.0	80.0%	5	21%
Pass (B)	26.0	65.0%	11	46%
Slightly Below Standard (C)	23.4	58.5%	1	4%
Weak (D)	16.0	40.0%	3	13%
Showed Little Knowledge (E)	12.0	30.0%	2	8%
Did Not Attempt (X)	1.0	2.5%	1	4%
Maximum Mark	35.0			
Average Mark	24.6			
Standard Deviation	8.8			
Coefficient of Variation	0.36			

Candidates performed reasonably well on this question, with a pass rate of 67%.

Part a):

Candidates were asked to decompose a forward contract into simpler securities and to calculate a delivery price.

More than half answered this very well. A few candidates did not answer the first part relating to decomposition of the forward and only did the calculations.

Part b):

This part required the computation of a market value for a bond under a forward contract and calculation of a bank's profit or loss on that date.

This was well answered by many. Candidates very often showed a good understanding of the principles involved in this question part.

Part c):

This part was complex and required the calculation of a 99% confidence level 1 week VaR. A clear understanding of the methodology from this part of the course was being tested here.

This was very well answered by about half of the candidates and proved to be a good discriminator of overall understanding of this topic. Weaker candidates struggled to understand the given covariance matrix or how to correctly use it. The square root of time scaling was also not well understood by weaker candidates.

Table 12 – Question 3

Question 3	**Total Marks: 40**			
	Marks Required	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	30.0	75.0%	2	8%
Pass (B)	22.0	55.0%	5	21%
Slightly Below Standard (C)	19.8	49.5%	3	13%
Weak (D)	12.0	30.0%	12	50%
Showed Little Knowledge (E)	8.0	20.0%	0	0%
Did Not Attempt (X)	1.0	2.5%	2	8%
Maximum Mark	35.5			
Average Mark	19.8			
Standard Deviation	6.8			
Coefficient of Variation	0.34			

Candidates found this question the most challenging, with a pass rate of 29%.

Part a):

Candidates were asked to manipulate Brownian motions and demonstrate an understanding of these stochastic processes.

About half of the candidates made a good attempt at this. The demonstration of independent increments for the derived process proved the most difficult part for candidates.

Part b):

Candidates were asked to apply Ito's Lemma in a novel context.

Again about half of the candidates made a reasonable attempt at this. Some of these candidates, however, still managed to get confused in applying this result. Careful study of the approach and its application in option pricing is advised for candidates studying this material in the future.

Part c):

Candidates were asked about aspects of the bitcoin futures market.

Many candidates struggled to provide relevant information in their attempt to answer this part of the question. It is important to remember that only relevant points will attract marks. Irrelevant points do not attract marks and, worse, take time away from answering other questions.

COURSE 6A GLOBAL RETIREMENT INCOME SYSTEMS
Chief Examiner's Report Semester 1 2015

7. Summary

7.1. Course Overview

The aim of the GRIS 6A course is to provide the knowledge, skills and judgement necessary for an actuary to understand the different systems used to provide retirement incomes and recognise the management issues in areas of regulation, governance and risk management. The course is designed to teach actuaries to use the actuarial control cycle to identify issues and develop solutions. The course is not limited to the Australian retirement income field but has cross-border application.

7.2. Assessment

The assessment model comprises three components:

Forum participation	MCQ exam	LAQ exam
10%	20%	70%

7.3. Pass Rates

23 candidates enrolled this semester. Of these, 1 withdrew, 1 was absent from the exam and 21 sat the exam.

It is proposed that 10 candidates be awarded a pass, which implies a pass rate of 48%.

Table 1 – Course Experience

GRIS	Course A Semester 1			Course B Semester 2		
Year	Sat	Passed	Pass Rate	Sat	Passed	Pass Rate
2015	**21**	**10**	**48%**			
2014	15	9	60%	11	7	64%
2013	19	8	42%	17	7	41%
2012	16	5	31%	14	3	21%
2011	18	9	50%	8	5	63%
2010	16	4	25%	13	7	54%
2009	14	5	36%	19	10	53%

- The pass rate in this subject has been relatively high (and certainly higher than the pass rate across all subjects). This may be due to the small number of candidates sitting the course, such that there is a higher proportion of practitioners than in other subjects. The small candidate numbers also mean that any variations (for example, 1 more candidate passing) can have a material impact on the statistics.

7.4. Overall Performance

- The participation mark was a very poor assessment tool. Furthermore it had a very distorting effect on overall marks and ranks. The two best performers excluding the participation mark were only borderlines including participation mark. Indeed the best performer overall excluding participation mark was ranked only 15/21 including participation mark, which had an effect of more than 10 marks!
- The MCQ exam was a poor assessment tool. Correlation to overall outcome was very low.
- Based on these observations, the current assessment structure should be reviewed.
- Performance in the LAQs was at least on par and probably better than previous semesters. This is a pleasing result, albeit based on relatively small candidate numbers.

7.5. Exam Question by Question Analysis

Table 10 – Question 1

Total Marks: 40	**Marks Required**	**% of Total Marks**	**Number of Candidates**	**Proportion of Candidates**
Strong Pass (A)	34	85%	5	24%
Pass (B)	30	75%	9	43%
Slightly Below Standard (C)	28	70%	2	9%
Weak (D)	18	45%	5	24%
Showed Little Knowledge (E)	10	25%		
Maximum Mark	36.5			
Average Mark	30.7			
Standard Deviation	3.5			
Coefficient of Variation	0.11			

Candidates performed well on this question, with a pass rate of 65%.
It was a fair to poor differentiator only.

This was the easiest question of the exam and included a significant proportion of bookwork. In the context of a single defined benefit member transferring to accumulation:

Part (a) asked for the advantages from an employer perspective

> This part was well-answered, with many candidates scoring full marks or close to it. The only notable omission from responses was alignment of remuneration structures. Bonus marks were awarded for treatment of surplus.

Part (b) asked candidates to determine the rate of return such that the benefit at age 65 would be equivalent under either benefit structure

> About two-thirds of candidates received full marks in this part. Most of the others applied only half a year's contributions (probably trying to add half a year's interest).

Part (c) required a letter to the employer outlining the advantages and disadvantages from the member's perspective and how the employer could improve the offer

Candidates missed many easy marks in this part, the most notable being insurance.

Table 11 – Question 2

Total Marks: 40	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass (A)	36	90%		
Pass (B)	28	70%	11	52%
Slightly Below Standard (C)	26.5	66%	2	9%
Weak (D)	21.5	54%	6	29%
Showed Little Knowledge (E)	16	40%	2	9%
Maximum Mark	32.25			
Average Mark	27.0			
Standard Deviation	4.0			
Coefficient of Variation	0.15			

Candidates performed well on this question, with a pass rate of 55%.
It was a good to fair differentiator.
An issue with the marking sheet for this question affected the grades for all candidates and initially passed only 2 candidates, requiring me to adjust the thresholds above.

This question required candidates to compare an existing (fictional) retirement system with 3 others and to outline the changes required to move from the existing system to each of the others.

The question was relatively open-ended. Few candidates answered the question in the manner of the marking guide; instead candidates tended to analyse each country individually rather than addressing key areas across all countries, which was also perfectly acceptable. Many candidates simply focussed on the limited information provided in the question, rather than expand beyond that into the likely implications and effect on the key areas of retirement systems for each country (e.g. effect on admin process, retirement outcomes, member responses/behaviour etc).

Most candidates were able to discuss the likely expense/cost impacts under each of the different structures/countries.

Most students recognised the need for government regulation, however very few commented on member education, communication levels or adequate resourcing/staffing of superannuation funds.

Very few candidates considered the possible inefficiencies from investment choice on retirement outcomes.

The level of written communication varied significantly between students with many substandard responses.

3 students misinterpreted the question to require a response in terms of the changes needed to move to the approach of only one of the systems only and not to each of the systems. This had the dual impacts of restricting the total marks available but also simplifying the work involved.

Table 12 – Question 3

Total Marks: 40	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass (A)	30	75%	4	19%
Pass (B)	26	65%	3	14%
Slightly Below Standard (C)	23	58%	7	33%
Weak (D)	19	48%	5	24%
Showed Little Knowledge (E)	16	40%	2	9%
Maximum Mark	32.5			
Average Mark	24.6			
Standard Deviation	4.8			
Coefficient of Variation	0.20			

Overall candidates performed poorly on this question, with a pass rate of 35%.
It was a good differentiator and had a high correlation to the overall results.

In the context of a single person annuitising retirement benefits:

Part (a) asked for the definition of 'adequate retirement income'

> A straightforward bookwork question, some candidates lost marks in this part for failing to provide a full description.

Part (b) asked candidates to explain the concept of deferring the annuity from 65 to 66

> The markers were lenient in their acceptance of multiple interpretations of life expectancy. Some candidates lost marks for failing to link mortality and life expectancy (and hence price).

Part (c) required candidates to calculate the rate of return that would equate the position at ages 65 and 66

> This part was very poorly answered. Candidates relied too heavily on Excel, without explaining their calculations. Some candidates did not even provide both scenarios! Most candidates did not value the 2 scenarios using equal bases. Many candidates over-simplified the problem by ignoring key assumptions, including inflation and living costs. Conversely some candidates over-complicated the problem by projecting for full life expectancy and applying a discount factor. Some candidates calculated a return that was very low or even negative and then failed to apply any checks for reasonableness.

Part (d) asked for the main drivers behind the rate of return

> Responses to this part were only fair, with most lacking explanation

Part (e) asked for the factors determining the adequacy of the deferred annuity

> Responses to this part were reasonable, the exceptions being those lacking explanation

Part (f) asked what impact the size of the lump sum benefit has on the decision to annuitise

This part was a good differentiator with better responses providing well-structured and thoughtful arguments

To pass this question, candidates typically required strong responses to parts (c) and (f).

COURSE 10 COMMERCIAL ACTUARIAL PRACTICE Examiners' Report Semester 1 2015

1. Summary

1.1. Course Outline

The Commercial Actuarial Practice (CAP) Course is designed to teach students to apply actuarial skills across a range of traditional and non-traditional areas by "contextualizing" actuarial solutions or approaches in the wider commercial environment.

The two assessment tasks are:

1. A take-home Post-Course Assignment ("Assignment") on one of the 3 non-traditional topics (Banking, Health, Environment). One-third of the students were randomly allocated to each topic. It is worth 20% of the final mark.
2. An 8-hour Case Study Exam ("Exam") worth 80% of the final mark, under exam conditions with the use of a computer (open book, but no internet access). The candidates had to choose 1 from the 5 mainstream topics (Life Insurance, General Insurance, Investment, Global Retirement Income Systems - GRIS, Enterprise Risk Management - ERM), perform all the necessary analysis and prepare a substantial written report.

1. An overall pass requires a total of 50%, without necessarily passing the Exam.

1.2. Pass Rates

78 candidates completed the course. Of these, it is proposed that 47 be awarded a pass, representing a **pass rate of 60%.** The pass rate has been very stable over time, and this semester is no exception.

Table 1 – Recent Course Experience

Semester	Sat	Passed	Pass Rate %
Semester 1 of 2015	**78**	**47**	**60**
Semester 2 of 2014	85	49	58
Semester 1 of 2014	86	52	60
Semester 2 of 2013	84	49	58
Semester 1 of 2013	74	39	53
Semester 2 of 2012	71	40	56
Semester 1 of 2012	82	47	57
Semester 2 of 2011	87	48	55
Semester 1 of 2011	79	47	59
Semester 2 of 2010	102	56	55

Semester 1 of 2010	97	57	59

1.3. Candidate Numbers

A total of 79 candidates were originally enrolled for the CAP course in Semester 1 of 2015. 45 candidates attended the 4-day CAP residential course at MGSM, being all those sitting CAP for the first time. In addition, 2 repeat candidates attended for relevant ½ days.

The candidate numbers and results can be summarised as follows:

	Post-Course Assignment only	**Case Study Exam only**	**Both**	**Total**
Originally enrolled	0	1	78	**79**
Withdrawals	0	0	1	**1**
Absent	0	0	0	**0**
Presented	0	1	77	**78**
Passed	0	1	46	**47**
Failed	0	0	31	**31**

The analysis by number of attempts is as follows:

Table 2A – Number of CAP Attempts

Attempt	**Candidates**	**Passed**	**Pass Rate**
1	45	26	58%
2	20	13	65%
3	8	5	63%
4	2	1	50%
5	1	1	100%
7	1	0	0%
9	1	1	100%
All	78	47	60%

2-9	33	21	64%

- It is pleasing to see a good proportion of repeat candidates passing – slightly more than those sitting for the first time. The 9th-attempt candidate was tutored by Colin Priest, and passed General Insurance clearly. The 7th-attempt candidate had the lowest mark in the Health assignment, and clear failures from both Life Markers, so some counselling will be given.

The analysis by Topic is as follows:

Table 2B – Analysis by Topic

Topic	Candidates	Passed	Pass Rate
ERM	12	8	67%
General Insurance	27	16	59%
GRIS	8	3	38%
Investment	1	1	100%
Life	30	19	63%
All	78	47	60%

- In recent semesters we have commented on the sometimes high pass rate in ERM and low pass rate in Life. This semester the number sitting ERM was down slightly and the pass rate was close to average. In Life the pass rate was also close to the average. GI's pass rate is marginally down, but there seems to be no cause for concern here. The low pass rate for GRIS is worthy of a closer look. Both repeating GRIS candidates failed, but the unusually high number of candidates sitting for the first time achieved a 50% pass rate which is not significantly lower than the average for all new candidates. This suggests there is nothing untoward going on.

The analysis by examination centre is as follows:

Table 3 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Canberra	1	0	0%
Melbourne	12	6	50%
Perth	1	1	100%

Sydney	56	35	63%
Subtotal Australia	**70**	**42**	**60%**
Auckland	3	3	100%
Hong Kong	1	0	0%
London	3	1	33%
Singapore	1	1	100%
Subtotal International	**8**	**5**	**63%**
Total	**78**	**47**	**60%**

The number of overseas candidates presenting is significantly lower than last semester (8 versus 15), and in fact fully explains the drop in the total number of candidates (78 versus 85). The relatively high overseas pass rate observed last semester was not repeated this time; in fact there was no significant difference in the performance between domestic and overseas candidates.

2. Course Administration

1. 2.1 Course Outline

The overall objectives of the CAP course are to enable students to:

- Apply actuarial skills across a range of traditional and non-traditional areas by "contextualising" actuarial solutions or approaches in the wider commercial environment;
- Apply ethical concepts, corporate governance requirements and actuarial professional standards when writing a report; and
- Successfully communicate the actuarial solutions or approaches to a range of audiences.

Given these objectives, the assessment for the course is focused on the practical application of judgment and on the written communication skills of the students, rather than on bookwork. The two assessment tasks are:

1. A take-home Post-Course Assignment ("Assignment") on one of the 3 non-traditional topics (Banking, Health, Environment), distributed after the 4-day residential course, for completion within 2 weeks. One-third of the students were randomly allocated to each topic, albeit with a check that repeat candidates are not allocated to the same topic 3 times in a row. The Assignment is worth 20% of the final mark. The result and feedback were supplied to candidates 3 weeks prior to the Exam.
2. An 8-hour Case Study Exam ("Exam") worth 80% of the final mark, under exam conditions with the use of a computer (open book, but no internet access). The candidates had to absorb the question material, choose 1 from the 5 mainstream

topics (Life, General, Investment, GRIS, ERM), perform all the necessary analysis and prepare a written report (typically 10 to 15 pages plus any appendices).

The pass mark is 50%, which is regarded as equivalent to the 60% pass mark adopted for the other part III courses.

2.2 Examiners

The examiners for this semester were:

Chief Examiner: Bruce Thomson

Assistant Examiner: Matthew Ralph

2.3 Course Leader

The Course Leader for this semester was: David Service

The CAP Faculty Chair for this semester was: Bridget Browne

2.4 Preparation of Case Studies

Case studies were prepared by the Course Presenters in the 8 topic areas listed below. Each was designed to be completed within 8 hours under exam conditions, even though the 3 non-traditional topics were completed as a take-home assignment. Each was fine-tuned in consultation with the Chief Examiner, formally scrutineered, and signed off by the Examiners.

The 5 traditional-topic questions aim to be practical within the subject area, without necessarily being entirely and strictly within the Part III syllabus.

Topic	**Course Presenter / Author**
Health	Kirsten Armstrong
Banking	David Service
Environment	Naomi Edwards
ERM	Bruce Edwards
Life Insurance	David Service
Investments	David Service
GRIS	Julie Cook, Minjie Shen
General Insurance	Colin Priest

Marker 1 roles for Banking (Stuart Crockett), Life Insurance (Peter Martin) and Investments (Aaron Bruhn) freed up David Service to be Marker 2 for all topics.

The CAP Faculty thanks Aaron Bruhn, Adam Butt and Bruce Thomson who stepped up at the last moment to present at the Residential Course, when David Service encountered a serious family problem. David Service and Bridget Browne are now preparing some formal contingency plans to cater for similar occurrences in future semesters.

Post Course Assignment results

Although marks and grades were given for the Post-Course Assignment, a pass/fail decision was not required for each candidate; this simply formed 20% of their overall mark.

Final scaled marks ranged from 35% to 85%, with an average of 64%. Candidates were only given a grade (Credit, etc) but were also given a copy of their Assignment with marked-up comments from the Marker. We believe these comments were particularly useful to candidates.

3.1 Banking

The Banking case study required candidates to provide advice to a large bank on how to decide whether to open or close a branch in any area.

3.2 Environment

The Environment case study required candidates to advise a carpet manufacturer on the implications of switching from broadloom to recyclable carpet squares, so that commercial users need only replace high-traffic areas rather than entire carpets.

3.3 Health

The Health case study required candidates to provide ammunition for a heart-health charity in lobbying government to fund a public-awareness campaign to reduce the delays before patients seek medical help.

4 Exam results

5.1 ERM

The ERM Exam required candidates to advise the management of an industry superannuation fund that had suffered a significant fraud. They had to recommend a response in respect of members affected by the fraud, propose a risk management approach to preventing future frauds and tactfully outline the role of the trustee in preventing fraud.

5.2 GRIS

The Exam for Global Retirement Income Systems required candidates to provide advice to a government on the funding and design of a Pay-As-You-Go pension plan. The impending privatization of some entities had to be dealt with, complicated by record-low interest rates.

5.3 General Insurance

The ERM Exam required candidates to analyse a proposed marketing campaign that involved cross-selling of low-cost personal accident insurance to existing customers using propensity modelling to find target segments and a multi-policy discount as an incentive. Candidates had to understand the risks associated with the campaign and come up with recommendations for mitigating them.

5.4 Investment

2. The Investments case required candidates to provide advice on a currency management strategy for a major beef exporter.

5.5 Life Insurance

3. The Life case required candidates to advise a large life intermediary on a proposal from its major product provider to pay a profit-share instead of sales commission.