Report to ECC from the Board of Examiners

SEMESTER TWO 2008

PART III

BOARD OF EXAMINERS REPORT

(PUBLIC VERSION)

Institute of Actuaries of Australia

CONTENTS

SUMMARY

Examination Administration

The Semester Two 2008 Part III examinations of the Institute of Actuaries of Australia ("Institute") were held between 20th October 2008 and 23rd October 2008. Candidates attended the examinations in Australia (Sydney, Melbourne, Canberra, Perth, Adelaide and Brisbane) and overseas (New Zealand, Hong Kong, China, Fiji, Germany, Japan, Korea, Malaysia, Singapore, Switzerland, Taiwan, The Netherlands, United Kingdom and USA).

This is the fourth year in which twice yearly examinations have been held. The tables below show the number of candidates sitting each exam over recent years. The number of candidates sitting in the latest period shows a slight decrease over that in Semester Two 2007 and Semester One 2008.

Table A: Candidate Numbers Sitting by Part III Course

	Subject	2005 (1)	2005 (2)	2006 (1)	2006 (2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments	187	129	162	150	171	166	150	120
2A	Life Insurance	61	62	53	51	53	54	61	66
2B	Life Insurance	22	28	25	32	37	43	36	50
3A	General Insurance	68	79	69	65	64	82	69	51
3B	General Insurance	18	34	48	41	48	44	40	62
4A	Superannuation & Planned Savings	19	11	12	8	15	n/a[6]	n/a	n/a
4B	Superannuation & Planned Savings	5	10	n/a[1]	7	n/a[5]	16	n/a[10]	n/a
5A	Investment Management & Finance	20	19	14	18	17	n/a[6]	35	n/a[11]
5B	Investment Management & Finance	10	16	14	15	n/a[5]	44	n/a[10]	35
6A	Global Retirement Income Systems							19[8]	n/a[11]
6B	Global Retirement Income Systems								18
10	Commercial Actuarial Practice	n/a	28	23[2]	47[3]	61[4]	70[7]	83[9]	87[12]
	Total	410	416	420	434	466	519	493	489

1. The 4B Course did not run in 2006 (1).
2. In Semester 1 2006 23 Individual Candidates enrolled, though some candidates only attempted either the Exam or the Case Study.
3. In Semester 2 2006 47 Individual Candidates enrolled, though some candidates attempted either the Exam or the Case Study.
4. CAP Semester 1 2007 61 individual candidates enrolled, 44 full course, 1 exam only, 12 case study only and 4 re-sat the case study and exam.
5. Course 4B and 5B did not run Semester 1 2007.
6. Course 4A and 5A did not run Semester 2 2007.
7. CAP Semester 2 2007 70 individual candidates enrolled, 47 full course, 6 exam only, 11 case study only (3 re-sat the case study and exam)
8. 6A GRIS introduced in Semester 1 2008 replacing Course 4A
9. CAP Semester 1, 2008, 83 candidates enrolled, 63 full course, 5 exam only, 13 case study only, 2 exam and case study only
10. Course 4B(to be replaced by 6B) and 5B did not run Semester 1 2008.
11. Courses 5A and 6A did not run in Semester 2 2008.
12. CAP Semester 2, 2008, 87 candidates enrolled, 46 full course, 15 exam only, 24 case study only, 2 exam and case study only

Results

Pass Rates

The number of candidates presenting for the Semester Two 2008 Part III Exams, the recommended passes and the resulting pass rates are shown in the table below:

Table B: Recommended Number of Passes by Part III Course

	2008 (2) Sat	2008 (2) Pass	2008 (2) %	2008 (1) Sat	2008 (1) Pass	2008(1) %	2007 (2) Sat	2007 (2) Pass	2007 (2) %	2007 (1) Sat	2007 (1) Pass	2007 (1) %
1 Investments	120	61	51%	150	59	39%	166	69	42%	171	56	33%
2A Life Insurance	66	32	48%	61	21	34%	54	21	39%	53	18	34%
2B Life Insurance	50	21	42%	36	14	39%	43	14	33%	37	8	22%
3A General Insurance	51	21	41%	69	36	52%	82	17	21%	64	24	38%
3B General Insurance	62	23	37%	40	16	40%	44	21	48%	48	23	48%
4A Super & PS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15	7	47%
4B Super & PS	n/a	n/a	n/a	n/a	n/a	n/a	16	7	44%	n/a		
5A Invest. Man. & Fin.	n/a	n/a	n/a	35	17	49%	n/a	n/a	n/a	17	6	35%
5B Invest. Man. & Fin.	35	11	31%	n/a	n/a	n/a	44	15	34%	n/a		
6A GRIS[5]	n/a	n/a	n/a	19	11	58%						
6B GRIS[7]	18	10	56%									
10 CAP – Case Study	73	50	68%	78	51	65%	63	47	75%	59[2]	39	66%
10 CAP – Exam	63	60	95%	70	51	73%	57	49	86%	49[2]	37	76%
Total	**489**	**241**	**49%[8]**	**493**	**215**	**44%[6]**	**519**	**211**	**41%**	**466[3]**	**177[4]**	**38%**

1. For CAP, in 2005 (2) the overall pass rate was 18/28 or 64%. In 2006 (1) the overall pass rate was 14/23 or 61%. In 2006 (2) the overall pass rate was 30/47 or 64%
2. CAP Numbers who presented for two different components
3. Includes all 61 CAP Candidates
4. Figure represents pass rate in respect of 61CAP students with 35 completing this module
5. 6A Global Retirement Income Systems new course Semester 1 2008
6. Figure represents pass rate in respect to all 83 CAP candidates
7. 6B Global Retirement Income Systems new course Semester 2 2008
8. Figure represents pass rate in respect to all 87 CAP candidates

The Chief Examiners aim to produce a consistent standard of passing candidates, rather than a consistent pass rate from year to year. This semester, the recommended overall pass rate of 49% is slightly above the range achieved in recent years of 38% - 44%. The overall pass rate is above that of last semester with the latest results as a whole boosted once again by the strong results in Course 10 CAP. However, excluding the CAP results the overall pass rate would have still been 44%.

Prizes

Prizes are awarded only once in a calendar year following the Semester Two examinations.

Fellows

The Part III Examination transition period from the pre-2005 system to the new post-2005 system ended at the end of 2007. So that students in transition (i.e. those who have passed at least one paper of a pre-2005 subject) would not be disadvantaged, a variation on the new pathway was approved in 2006. There are two ways in which candidates can qualify as Fellows.

(i)   Candidates must pass Module 1 (Investments), one full specialist subject (Modules 2 and 3) and Module 4 (Commercial Actuarial Practice).
(ii) Candidates in transition (ie. those who have completed at least one paper of a pre-2005 subject) must pass three Modules and Module 4 (Commercial Actuarial Practice), providing that the equivalent of Modules 2 and 3 in one special area have been completed.

If the Council adopts the recommended passes, the number of members that will be made Fellows (subject to attendance at a Professionalism Course, satisfying the Practical Experience Requirement and paying any relevant exemptions) will be:

Category	2008(2)	2008(1)	2007(2)	2007(1)	2006(2)	2006(1)	2005(2)	2005 (1)
Pre-2005 system	0	0	1	1	7	14	19	7
Post-2005 system	71**	37*	41	32	25	10	14	-
Total New Fellows	**71****	**37***	**42**	**33**	**32**	**24**	**33**	**7**

* 38 candidates completed all the Part III exams in semester one 2008 but one of these candidates had not completed all Part I exams. This candidate completed their last Part I exams in September 2008.

** 72 candidates completed all the Part III exams in semester two 2008 but one of these candidates had not completed Part II.

CHAIR'S REPORT

1. Examination Administration

1.1 The Board

The Board of Examiners oversees the Part III examination process of the Institute of Actuaries of Australia (Institute). The Board of Examiners consists of the Chair and her assistants and the Chief Examiners for each subject, supported by Institute staff.

For Semester Two 2008 the Chair and her Assistants were:

Chair	Ms Caroline Bayliss
Assistant Chair	Mr Mike Fowlds
Assistant Chair	Mr Wesley Caine
Assistant Chair	Ms Raewin Davies
Assistant Chair	Ms Catherine Robertson-Hodder
Assistant Chair	Mr David Underwood

The Chief Examiners for Semester Two 2008 were:

Course 1: Investments	Mr Tim Kyng
Course 2A: Life Insurance	Mr Ian Werner
Course 2B: Life Insurance	Mr Andrew Gill
Course 3A: General Insurance	Mr David Gifford
Course 3B: General Insurance	Mr Adam Payne
Course 5B: Investment Management & Finance	Mr David Pitt
Course 6B: Global Retirement Income Systems	Mrs Debra Lewis
Course 10: Commercial Actuarial Practice	Mr Colin Westman

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. I would also like to thank Caroline, as Chair and her assistants, Mike, Raewin, Catherine and Wesley for their support and untiring efforts in ensuring the overview process of the Board worked smoothly and that the quality of the examinations and results was maintained.

1.2 Meetings of the Board

The Board met on three occasions as part of the Semester Two 2008 exam process.

- The first meeting was held on 9th July 2008. It was attended by representatives from each Course (Chief Examiners/Assistant Examiners). The purposes of this meeting were to:
    - update on enrolment numbers and course offerings for Semester Two 2008
    - identify Chief & Assistant Examiners and Course Leaders for each course for Semester Two 2008
    - outline the responsibilities of Chief Examiners and the Semester Two schedule
    - review progress on the drafting of the exams to date

- The second meeting was held on 17th September 2008. It was attended by a representative from all courses. The purposes of this meeting were to:
    - discuss proposed changes to the BoE Handbook

- the status of Semester Two 2008 examination papers, model solutions and sign-off process.
- discuss the marking spreadsheets review the recruitment of markers and arrangements for the marking day

- The third meeting was held on 3rd December 2008 and was attended by Board of Examiners, Chief Examiners or their representative from all courses. The purposes of this meeting were to:
    - review the recommended pass lists and treatment of borderline candidates
    - review the recruitment of Chief Examiners for Semester One 2009.

1.3 Administration and Exam Supervision

The Board of Examiners was ably assisted by a number of Institute staff, in particular Mr Stephen Wright, Mr Philip Latham and Ms Rebecca Brown. Philip and Rebecca 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 for Semester Two 2008 and the Board of Examiners team is indebted to them all.

The Semester Two 2008 Part III examinations in Sydney and Melbourne were again run by an external consultancy – Language and Testing Consultancy (LTC). Other examinations were administered by Fellows or other approved supervisors. All examinations ran smoothly.

1.4 Course Leaders

In October 2004, Course Leaders were appointed by the Institute to undertake a variety of tasks relating to modules 1-3 of the new Part III education program. One of the roles of the Course Leaders was to draft examination questions in consultation with the Chief Examiners. The following is a list of the Course Leaders for Semester Two 2008:

Course 1 - Andrew Leung (assignments and exams) and Tim Furlan, Simon Eagleton and Andrew Leung (tutorials)

Course 2A and 2B - Sue Howes (Faculty Convenor), Aaron Bruhn (2A Assignment and Exams), Bruce Thomson (2A tutorials), David Su (2B Assignments and Exams), and Alan Udell (2B tutorials)

Course 3A and 3B - GI Faculty, David Heath (3A and 3B Assignments, Exams, tutorials and discussion forums)

Course 5B – Tim Kyng (Course Leader, Assignments, Exams, tutorials and discussion forums)

Course 6B – Peter May (Faculty Convenor), Jeffrey Chee (assignments and exams),David McNeice (tutorials and discussion forums)

Course 10 - David Service

Another role of the Course Leaders was to draft assignment questions in consultation with each subject Faculty. The Board of Examiners was not involved in this process.

1.5   The Examination Process

The Semester Two 2008 examination process began with an initial meeting of the Board of Examiners and Course Leaders. Some had begun drafting examination questions from June 2008. Once Chief Examiners had been appointed in all subjects they met with Course Leaders (where applicable) to discuss the draft exam questions.

Question setting

The basic framework followed by each subject to setting exam papers is the same. The Semester Two 2008 Part III examinations were run on an open book basis. Each subject includes rigorous review processes. The general framework used to set examination papers is described as follows:

- The Course Leader (or equivalent) drafts the examination questions in consultation with the Chief Examiners.
- Draft exams and solutions are reviewed by scrutineers for coverage and fairness. The scrutineers are a mix of newly qualified actuaries and experienced actuaries.
- At least one scrutineer 'sits' the paper under exam conditions to assess the length of the paper.
- Exams are redrafted after feedback from the scrutineers.
- Draft exams, solutions and marking guides are then submitted to the BoE team for review. Two members of the BoE team review the draft exams and solutions.
- Exams, solutions and marking guides are finalised by the Chief Examiners and their Assistants.
- The Course Chief Examiners sign off the final examination papers and solutions.
- A member of the BoE team also signs off on the examination papers and solutions.

Exam marking

The general framework used to mark examination papers, grade candidates and determine passes is described as follows:

- Two markers marked each question. For Investments, due to the large number of candidates, a team of four markers marked each question with each marker marking half of the papers, in teams of two. Inconsistencies in marks for a candidate were discussed by the markers and resolved (in most cases), before the results were forwarded to the Chief Examiner.
- Marks were scaled to allow for the fact that some questions were more difficult than others.
- Each candidate was awarded a grade for each question of A, B, C, D or E, where A was regarded as a strong pass and B an ordinary pass.
- Candidates' overall performance was determined using several metrics including total raw mark, total scaled mark, weighted average grade, weighted average rank and number of pass grades per question. The key determinant however was total scaled mark.
- Candidates were ranked based on these metrics, particularly total scaled mark.
- Candidates' assignment grades and marks were added to the exam metrics, with a weighting of 15% for Course 1 Investments and Modules 2 and 3.
- Candidates were divided into clear passes, clear failures and a middle group that required further consideration.
- The Chief Examiner reviewed the middle group individually. The pass/fail decision was made after assessing the candidate's whole exam paper, his/her performance in the judgement questions, how badly he/she performed in the questions he/she failed and whether they were 'key' areas of the course and his/her performance in the assignments.

1.6   The Assignment Process (Modules 1-3)

Question Setting
The basic framework followed by each course to setting assignment questions is the same and all subjects contain review processes. The general framework used to set assignments is described as follows:

- The Course Leader drafts the assignment. They are each worth 15% of the total marks for the subject.
- Draft assignments and solutions are then reviewed by each Faculty for coverage and fairness.
- Each Faculty signs off the assignments.

Students were given access to the assignments via the specific link on the Institute learning management system.

The Board of Examiners did not review or comment on the assignments.

Assignment Marking
The general framework used to mark assignments, grade candidates and determine passes is described as follows:

- Each question was marked only once, with the assignments being divided up among multiple markers. Different markers had different marking standards and pass criteria. Course Leaders sample marked 5% of all assignments (or at least one assignment from each marker). Inconsistencies in marks for a candidate were to have been discussed by the relevant marker and the Course Leaders and resolved, before the results were forwarded to the Chief Examiner.
- Marks were not scaled to allow for the fact that some questions were more difficult than others.
- Each candidate was awarded a grade for each question of A, B, C, D or E, where A was regarded as a strong pass and B an ordinary pass.
- Candidates' results were based on total raw marks.

In Semester Two 2008 assignments were submitted only electronically. Markers were allocated candidate numbers and accessed and marked on-line and or by hard copy forwarded by the IAA. Feedback was also posted electronically by the markers and/or IAA. This enabled a faster turn around and delivery of feedback as once all assignments were marked, students could access their feedback immediately.

1.7   Module 4 CAP - The Case Study Process

The CAP course was developed and originally delivered for the Institute by the ANU. Semester Two was run directly by the Institute. The CAP team involved in the previous semester have been retained on individual contracts. The team included David Service, Elayne Grace, Richard Madden, Peter Martin, Colin Priest and Andrew Brown. The team also developed the assessment materials for the course and did the marking.

The development and delivery of the course was overseen by a Faculty, consisting of Ken McLeod (Chair), Andrew Brown, Arie van den Berg, David Knox and Donna Walker. Colin Westman also acted as Chief Examiner, assisted by the other members of the Faculty.

1.8   Examination Dates

The Semester Two 2008 Part III examinations were held on the following dates:

Course 1:   Investments   Monday 20th October
Course 10:   Commercial Actuarial Practice   Monday 20th October
Course 2A: Life Insurance   Tuesday 21st October
Course 2B: Life Insurance   Tuesday 21st October
Course 3A: General Insurance   Wednesday 22nd October
Course 3B: General Insurance   Wednesday 22nd October
Course 5B: Investment Management & Finance   Thursday 23rd October
Course 6B: Global Retirement Income Systems   Thursday 23rd October

1.9   Assignment Dates

The Semester Two 2008 Part III assignments were due on the following dates:
                          27th August (C1)
                          20th August (2A)
                          3rd September (2B)
                          28th August (3A)
                          10th September (3B, 5B and 6B)
                          12th September Case Study (CAP)

1.10   Examination Centres

Candidates sat the exams in 6 centres in Australia and 14 centres overseas. Individual exam locations were arranged in China (4), Germany (1), Japan (3), Korea (2), Fiji (1),Switzerland (3), Taiwan (1), The Netherlands (1), and USA (1). This table includes candidates who sat the CAP Exam

Table 1: Candidates by Exam Centre – Semester Two 2008

	Number of Candidates
Australia	385
Adelaide	2
Brisbane	3
Canberra	8
Melbourne	69
Sydney	298
Perth	5
Overseas	80
China	4
Fiji	1
Germany	1
Hong Kong	16
Japan	3
Korea	2
Malaysia	5
New Zealand	8
Singapore	19
Switzerland	3
Taiwan	1
The Netherlands	1
United Kingdom	15
USA	1
Total	465

1.11   Exam Candidature

Candidate Numbers
The number of candidates sitting the Part III exams in Semester Two remained broadly consistent compared with the previous semesters, being slightly below the numbers in Semester One 2008 and Semester Two 2007. There was a considerable decrease in the number of candidates sitting course C1 (Investments) over the previous semester. It is thought that candidates may prefer to sit this subject once it is run by Access Macquarie. Courses 2B (Life insurance) and 3B (General Insurance) had significant increases in candidate numbers over Semester 1 2008. These numbers are in line with those of the 2A and 3A courses which candidates usually attempt first.

Table 2: Candidate Numbers Sitting by Part III Courses

	Subject	2005 (1)	2005 (2)	2006 (1)	2006 (2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments	187	129	162	150	171	166	150	120
2A	Life Insurance	61	62	53	51	53	54	61	66
2B	Life Insurance	22	28	25	32	37	43	36	50
3A	General Insurance	68	79	69	65	64	82	69	51
3B	General Insurance	18	34	48	41	48	44	40	62
4A	Superannuation & Planned Savings	19	11	12	8	15	n/a[6]	n/a[8]	n/a
4B	Superannuation & Planned Savings	5	10	n/a[1]	7	n/a[5]	16	n/a[10]	n/a
5A	Investment Management & Finance	20	19	14	18	17	n/a[6]	35	n/a
5B	Investment Management & Finance	10	16	14	15	n/a[5]	44	n/a[10]	35
6A	Global Retirement Income Systems							19[8]	n/a
6B	Global Retirement Income Systems								18
10	Commercial Actuarial Practice	n/a	28	23[2]	47[3]	61[4]	70[7]	83[9]	87
	Total	**410**	**416**	**420**	**434**	**466**	**519**	**493**	**489**

1. The 4B Course did not run in 2006 (1).
2. In Semester One 2006 23 Individual Candidates enrolled, though some candidates only attempted either the Exam or the Case Study.
3. In Semester Two 2006 47 Individual Candidates enrolled, though some candidates attempted either the Exam or the Case Study.
4. CAP Semester 1 2007 61 individual candidates enrolled, 44 full course, 1 exam only, 12 case study only and 4 re-sat the case study and exam.
5. Courses 4B and 5B did not run Semester 1 2007.
6. Courses 4A and 5A did not run Semester 2 2007.
7. CAP Semester 2 2007 70 individual candidates enrolled, 47 full course, 6 exam only, 11 case study only (3 re-sat the case study and exam)
8. Course 6A was introduced in Sem 1 2008, replacing Course 4A
9. CAP Semester 1, 2008, 83 candidates enrolled, 63 full course, 5 exam only, 13 case study only, 2 exam and case study only
10. Courses 4B (to be replaced by Course 6B) and 5B did not run Semester 1 2008.
11. CAP Semester 2, 2008, 89 candidates enrolled, 2 withdrew, 47 full course, 15 exam only, 24 case study only, 3 exam and case study only.

Withdrawal Rates

In Semester Two 2008, 527 candidates initially enrolled in courses, however 38 candidates subsequently withdrew from courses or did not present for the examination.

The number of candidates that enrolled for a course but withdrew prior to the examination was highest in absolute terms for Investments (9 officially withdrew prior to the examinations and 5 did not present for the exam, out of 134 originally enrolled). 3A (General Insurance) had the highest rate of withdrawal at 15%. Compared to Semester 1 2008, the overall withdrawal rate was slightly lower with the number of candidates being absent from the exam significantly lower – there were 17 in Semester 1. The withdrawal rates for all subjects were:

Table 3: Withdrawal Rates by Part III Course – Semester Two 2008

	Subject	Initially Enrolled	Withdrew prior to Exam	Absent from exam	Total Withdrawing	%
1	Investments	134	9	5	14	10%
2A	Life Insurance	68	2	0	2	3%
2B	Life Insurance	54	4	0	4	7%
3A	General Insurance	60	8	1	9	15%
3B	General Insurance	66	4	0	4	6%
5B	Invest Management & Finance	38	3	0	3	8%
6B	Global Retirement Income Systems	18	0	0	0	0%
10	Commercial Actuarial Practice	89[1]	2	0	2	2%
	Total	527	32	6	38	7%

1. Includes exam and case study CAP candidates

Candidate Mix

The mix of courses sat by candidates is broadly similar to that in previous years. The reduced proportion for Investments seems to be offset by an increased proportion for Life Insurance. Typically, the percentage enrolling in Investments will be higher in Semester One than in Semester Two as it is compulsory under the new Part III structure and new students are likely to sit it first.

The enrolments for General Insurance have been fairly constant at approximately 23% for recent semesters. The Global Retirement Income Systems course, which effectively replaced the Superannuation & Planned Savings course, has around the same proportions enrolled at 4%. The Investment Management and Finance enrolments show a slight decrease over the previous semester. The CAP (Commercial Actuarial Practice) course has continue to increase in overall proportion as candidates flow through under the current qualifying system with repeating candidates also adding to the numbers.

Table 4: Candidate Mix by Part III Course – Enrolments Semester Two 2008

	Subject	2005 (1)	2005 (2)	2006 (1)	2006 (2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments[1]	46%	31%	39%	35%	38%	33%	32%	25%
2	Life Insurance	20%	21%	19%	19%	20%	19%	19%	24%
3	General Insurance	21%	27%	28%	25%	24%	24%	23%	23%
4	Superannuation & P.S.	6%	5%	3%	3%	3%	3%	n/a	n/a
5	Investment Mgt & Finance[2]	7%	10%	7%	8%	4%	9%	8%	7%
6	Global Retirement Income Systems							4%	4%
10	Comm. Actuarial Practice	n/a	6%	5%	9%	12%[1]	12%[2]	16%[2]	18%[4]
	Total	100%	100%	100%	100%	100%	100%	100%	100%

1. Includes all CAP candidates enrolled including case study and or exam only – 61
2. Includes all CAP candidates enrolled including case study and or exam only -70
3. Indicates all CAP candidates enrolled including case study and or exam only – 83
4. Includes all CAP candidates enrolled including case study and or exam only - 87

2. Examination Papers and Assignments

2.1 Examination Structure

The structure of the examinations in Semester Two 2008 was a single three-hour exam paper for Modules 1-3 and a two-hour exam paper for Module 4 (Course 10 – Commercial Actuarial Practice). The exams for Modules 1, 2 & 3 were worth 85% of the final assessment, with the assignment worth 15%.

For Modules 1-3, each course was assessed individually. That is, a candidate can choose to sit (and subsequently pass or fail) only Course A (relating to Module 2) or Course B (relating to Module 3) of the subject. This differs from 2004 and earlier exams where candidates sat for the entire course (both A and B parts). For the 2004 exams, candidates were awarded a transitional pass for a paper if they passed either Paper 1 (Course A) or Paper 2 (Course B).

For Module 4, Commercial Actuarial Practice, assessment was determined as follows:

- *First piece*: participation in a one-week residential course (5%) and completion of a case study in a traditional practice area, over 8 hours, on the course's 5th day (45%).

- *Second piece*: two-hour exam paper on non-traditional areas of actuarial practice, answering 2 out of 4 questions (50%).

- In order for a candidate to obtain an overall pass in Module 4, both pieces of the assessment had to be passed. Students receiving an overall fail could be awarded a pass for either assessment piece and would only need to complete the other piece in a future semester, within a two-year period.

2.2 Assignment / Case Study Structure

The structure of the assignments in Semester Two 2008 was one assignment for Modules 1, 2 and 3 with the assignment worth 15% of the final assessment.

Module 4 (Course 10 – Commercial Actuarial Practice) was assessed by 50% exam and 50% case study. Within the 50% case study assessment, which needed to be passed independently of the exam, the case study itself was worth 90% of the final assessment. Candidates completed the case study on the final day of the residential course, under exam conditions. In addition, general participation in the residential course was assessed at 10% of the case study marks.

2.3 Examination Standards

In each course there was a mix of questions covering three categories:

- applying bookwork to familiar and unfamiliar circumstances. This category is aimed at testing the candidates' knowledge and understanding (KU)
- problem solving requiring simple judgement (SJ)
- problem solving requiring complex judgement (CJ).

The questions aimed to cover the whole syllabus. In the case of Module 1 (Investments) the examination was based on the syllabus and a previously determined set of readings.

The standards to be achieved by candidates sitting each course, the principles on which papers are to be set and the marking procedures, are set out in the Guidelines to Examiners. To ensure the examination papers had proper balance, guidance as to the proportion of marks given to each category needed to be established. The standards of difficulty as determined by the Chief Examiners at the time they set the papers are set out below, with a comparison to the prior semester.

Table 5: Standards of Difficulty by Part III Course

		Knowledge & Understanding		Simple Judgement		Complex Judgement	
	Subject	2008 (1)	2008 (2)	2008 (1)	2008 (2)	2008 (1)	2008 (2)
1	Investments	20%	18%	40%	43%	40%	39%
2A	Life Insurance	20%	19%	40%	41%	40%	40%
2B	Life Insurance	23%	19%	38%	36%	39%	45%
3A	General Insurance	23.5%	24%	43.5%	36%	33%	40%
3B	General Insurance	18%	22%	42%	37%	40%	41%
5A	Invest. Management & Finance	20%	n/a	38%	n/a	42%	n/a
5B	Invest. Management & Finance	n/a	24%	n/a	41%	n/a	35%
6A	Global Retirement Income Systems	19%	n/a	47%	n/a	34%	n/a
6B	Global Retirement Income System	n/a	19%	n/a	40%	n/a	41%
	Targets	**15% - 25%**		**35% - 45%**		**35% - 45%**	

The examination papers were broadly similar in standard of difficulty to prior periods.

Copies of the examination papers have not been included within this report in the interests of space. They are available from the Institute if required. Detailed comments on the quality of candidates' answers to the exam questions are contained in each Chief Examiner's report.

2.4   Assignment Standards

The setting of standards for the assignments used the same approach as for the examinations, that is, questions were set covering the following three categories:

• applying bookwork to familiar and unfamiliar circumstances. This category is aimed at testing the candidates' knowledge and understanding (KU)
• problem solving requiring simple judgement (SJ)
• problem solving requiring complex judgement (CJ).

Whilst the target weighting of each category for the exams was essentially 20% KU / 40% SJ / 40% CJ, the target weighting for the assignments was 40% KU / 40% SJ / 20% CJ. With the introduction of assessable assignments the exam is only worth 85% of the final assessment from 2007. This means that a higher component of the assessment is KU ("bookwork") and a lower proportion of the assessment is CJ ("complex judgement"), under the new system, compared with 2004 and earlier.

Although the target weightings of the assignments for each subject were 40%/40%/20% the Board of Examiners was not informed of the actual weightings of any of the assignments. Copies of the assignments were not supplied to the Board of Examiners, but should be available from the Institute if required.

2.5   Security of Examination Papers

Procedures adopted in 2002 to improve the security of examination papers were continued in 2008:

- A marking day was held on Saturday 25 October for Course 1, Course 2A, Course 2B, Course 3A and Course 3B markers.
- Scanned version of exam answers were made available to markers in an internal installation of the Institute's Learning Management System for the first time this semester.
- Overseas supervisors were required to photocopy papers before sending them by courier to the Institute office.
- Secure couriers were used to transport papers between markers.
- Chief Examiners allocated two markers from the same city for each question as far as were possible (so papers were not moving too frequently between cities).

2.6   Security of Assignments

In Semester Two 2008 markers were given three options for accessing, marking and returning results and comments to the IAA and students.
Accessing assignments: Markers could opt to proceed with marking and returning comments in one of the following three ways:
1. Access and load comments via the on-line learning management system (LMS)
2. Receive a hard copy of the assignment form the IAA but upload comments directly via the LMS
3. Receive a hard copy from the IAA. Return the Hard copy to the IAA who scanned and uploaded comments on the LMS.
The majority of markers opted for Method 1. This enabled students to receive feedback in a more timely manner to previous semesters.

For all results, spreadsheets were sent directly to either and/or the IAA and the Course Leader.

2.7   Comments on Candidates' Examination Performance

General observations on candidates' performance in each subject are as follows. These observations include my own comments.

Course 1 – Investments
The overall performance on this semester's exam is considerably better than that of last semester, with 51% of candidates passing the exam compared with 39% last semester. This pass rate is also higher than it has been in recent times. The course leader for C1, advised that in his opinion, this semester's cohort of students is of higher quality than in previous semesters. This is supported by the fact that the assignment results are better this semester than last semester with 60% passing the assignment this time compared with 42% last time.

Enrolments in C1 are significantly lower this semester than in the previous semester. We have anecdotal evidence that many students have put off enrolling in C1 this semester and intend to enrol in it next year when the course is being outsourced to Macquarie University. Presumably this is because they believe their prospects of passing will be better then. That suggests that weaker students have deferred enrolling in C1 till next year.
For subject C1, the number of exams to be marked is substantially larger than for the other subjects. Due to the relatively short time frame for doing the marking and grading, 2 teams of 2 markers are used for the double marking of each question this semester. Marks are then adjusted in order to arrive at a set of adjusted raw marks that has more consistency

and fairness than the original set of raw marks. The same approach was used as in Semester 1 2008.

Question 2 was the one that students performed best on, as measured by the average mark and the proportion passing. Questions 3 and 5 were the most difficult questions for students, with lower average marks and lower proportions passing.

Some general comments on student performance were that the readability of some answers was very poor – both in terms of legibility and the standard of English. In several instances it was simply not possible to understand the point being made. In others, candidates missed out on marks because even though one suspected they understood the issue, they could not articulate it. Many candidates repeated themselves or were too verbose. Many candidates appeared to lack time management skills in answering the exam.

Course 2A - Life Insurance
The overall pass rate of 48% (of those sitting the exam) compares with a pass rate of 34% for the 2008, Semester 1 exam. Compared to last semester the overseas pass rate has deteriorated from 38% (6 out of 16) to 27% (4 out of 15) and now stands around half of the Australian pass rate which has increased from 33% to 55%.

Overall the exam paper acted as a reasonable discriminator, with raw marks (including the assignment) ranging from 55.2 to 138.5 (excluding the candidates who did not present for the exam). This was an equivalent range to that achieved in the previous semester. Overall student performance was significantly better than in the previous semester.

The examiners' impression of the paper was that it was interesting and challenging, although not too difficult in content and this view was reinforced by the comments made by the markers. In many cases there were multiple ways to earn the available marks. On the other hand it was a reasonably long paper with significant time required for calculations in some of the questions. It is a paper that should have provided a good broad test of candidates' knowledge, understanding and judgement.

Nonetheless some consistent messages from the markers were as follows:

- Candidates are failing to read the questions carefully, and to make sure they are answering everything that is asked in them.
- Candidates are generally good at repeating bookwork, but are often not able to consider how the book work may apply in the particular situation presented to them.

A few particular comments were:
- Question 1: although students recognised the issue of channel conflict in part c) when asked to comment on Sales concerns almost all failed to mention it in part a) when discussing products to be offered. In general part c) was poorly answered and especially the issues of Market research, choice of supermarket partner and the Finance/Valuation Actuary section.
- Question 2: part d). The question asked for the initial steps of a feasibility study but a number of students gave the initial steps required to actually proceed with the rationalisation. It appears that they may have stopped reading the question when they got to the words "initial steps".
- Question 3: in part b) most candidates did not calculate the termination rates for disability claims, perhaps indicating that they did not understand that these would be a vital feature of any analysis of the DI experience.
- Question 4: part b), this question was misinterpreted by most students as "what factors need to be considered **when** increasing surrender values" when the question asked "what factors needed to be considered **before** increasing surrender values".

- Question 5: The concepts behind the question seemed to be understood. The discriminating factor was how well the answers were explained and linked back to the situation posed in the question: eg part B) DII was somewhat ignored and difference between active lives and open claims sometimes not appreciated, in part C) candidates that did better described each of the risks faced and how the components of the asset allocation were chosen to address these risks.

- One point of concern is around markers problems with the marking guide and the mechanism to resolve these. At the moment they make the adjustments that they believe are needed and by the time the results are compiled and supplied it may be too late to unwind these if this was felt to be necessary. This was not a significant problem for this exam. However a better use of the opportunity of the marking day and a few emails early in the process could alleviate this potential problem. In future I would recommend that the "Chief Examiners Note to Exam Markers" be amended to state that the altering of the application of the marking guide should only be done in consultation with the Chief Examiner.

Course 2B - Life Insurance

Overall, the performance on this exam was similar to that of last semester with a pass rate of 42% compared to 39% last semester. The pass rate for overseas students was also 42%. As detailed in the Chief Examiner's Report, there were some questions that were answered reasonably, and others that were not answered well.

As usual, many candidates clearly did not allow sufficient time to complete each question. Consequently, many marks were lost due to poor, rushed responses to the last two questions of the exam.

It was clear from the marking that there were several examples of candidates who spent significant amounts of time trying to attain A grade answers to some questions at the expense of time allocated to other questions. One borderline candidate who had a very high mark was close to failing despite having 2 very high A's as they clearly left insufficient time to complete the remaining questions.

Course 3A - General Insurance

In setting the paper, the intention was to have a consistent level of difficulty with previous papers. The standard was lower than semester 1 2008 (with a 52% pass rate), but higher than Semester 2 2007 (with only a 20% pass rate). The pass rate is well within the range of historic pass rates.

The average raw exam mark this semester was 90, relative to 110 for May 2008 and 74, 104, 85, 100 and 86 for the November 2007, May 2007, November 2006, May 2006 and November 2005 examinations.

The average raw marks in each of the six exam questions ranged from 39% to 61% of the total marks available, similar to the May 2008 exam (36% to 57%) although four of the six questions had 45% or less, compared to four having 55% or more in May 2008. Prior exam raw marks were (27% to 45% in November 2007, 47% to 59% in May 2007, 29% to 58% in November 2006, 43% to 55% in May 2006 and 26% to 57% in November 2005).

Questions 5 and 6 were the poorest, with many candidates failing to make substantial progress on the calculation components of the questions.

Specific common mistakes and weaknesses are discussed in the question analysis contained in the Chief Examiner's Report.

Course 3B - General Insurance

Overall, the exam paper and assignment (combined) acted as a reasonable discriminator, with raw marks ranging from 70 to 132 out of 200. This range was narrower than the range for last semester (66 to 137 out of 200). The higher average raw marks compared to last semester (108 compared to 106 for last semester) were partly due to the exam and partly due to the assignment. Overall candidate performance was similar to that in prior semesters.

The impression that the examiners had after setting the paper was that it was not a particularly difficult paper, in the sense that it did not contain one or more questions that required candidates to apply core concepts in extraordinary new areas. However, we felt that on balance it was a reasonable paper that would provide a good broad test of candidates' knowledge and understanding and ability to apply this, and their judgement, to some practical situations.

Question 5 was poorly attempted. Few candidates answered this in the manner expected by the examiners. We think this was largely due to some aspects of the question's wording and the lay out of some of the numbers in the question. However, the question had been significantly simplified through the exam scrutineer process. Whilst some of the calculations may have been testing under exam conditions, there were some relatively easy marks available if the candidates approached the question in a clear and structured manner. This suggested poor exam technique also played a role in the overall low scores. We concluded that this question was marked fairly and did not distort the overall assessment process.

Generally the scores assigned by the markers were consistent with what might normally be expected based on the marking guide. Marker pairs had generally reconciled any differences in their marks and the extent of remarking was fairly limited. Markers adjusted the grade cut-offs according to the perceived difficulty of the question. The examiners reviewed these scales where necessary and were satisfied with the thresholds assigned and the spread of marks.

There were few candidates meeting 3 or 4 of the pass criteria (only 7). Most candidates either did well overall (26 candidates satisfied 5 or more of the criteria) or did poorly overall (29 candidates satisfied 2 or fewer of the criteria). This is consistent with last semester. The examiners reviewed the marking thoroughly to ensure this was not the result of some anomaly in the marking process.

The overall pass rate is broadly comparable to recent semesters for this course.

Candidates found question 3 the easiest of the exam questions (76% pass rate) and question 5 the most difficult (15% pass rate).

There is more detail in the question by question analysis below. Nonetheless, some consistent messages from the markers were as follows:

- Candidates are not going beyond "stock" answers. They often ignore information given in the question in favour of "lists" of responses and standard approaches, without adapting these for the situation or considering the appropriateness in the circumstances. It is sometimes difficult to conclude whether the candidates have the requisite skills to apply their knowledge, or if this is exam technique issue. We identified this comment in the corresponding Chief Examiner's report for Course 3B: General Insurance last semester.
- Candidates do not necessarily respond to all points raised in a question, even where the question specifically asks them to consider these.

- Specific common mistakes and weaknesses are discussed further in the question by question analysis contained in the Chief Examiner's Report.

Course 5B- Investment Management and Finance

The overall pass rate for this course was 31%, which was slightly below the 34% of the previous semester. No overseas students passed the exam however (9 sat). The examiners reviewed the pass rates by question and assignment for local and for international candidates. It was noted that international students performed comparatively worse on Q1 and Q2 on the exam. These questions, however, did not involve significant amounts of reading or writing, instead being rather technical in nature. So it did not appear that language skills were a barrier to international students passing.

The exam paper proved to be a very good discriminator of student understanding and ability to apply judgement with raw marks (on the exam component only) ranging from 51 to 145 out of 200. This was similar to semester 2 2007 where raw exam marks ranged from 38 to 125 out of 200. The average raw exam score this year was 92 out of 200. This reflects the adequate challenge provided by the exam.

The examiners felt that this year's exam would provide a suitable level of challenge to the candidates. A very detailed marking guide was prepared for the markers which meant that some candidates showed understanding but did not pick up as many marks as they may have thought they would. This fact was taken into account by both the markers and examiners in determining the cut-off points for the letter grades awarded to each question.

Candidates found that Q6 was the easiest. While this question did require some judgement, specifically the ability to reverse engineer the payoff from a complicated financial product, candidates had seen similar style questions, although with a different financial product, on previous exam papers. It was pleasing that candidates are using the past examination material that is available to them as part of their preparation. The remaining questions all had broadly similar pass rates.

Course 6B – Global Retirement Income Systems

The pass rate for this course was 56% which is comparable to the 58% pass rate for the 2008 semester 1 course. Overall candidates did well in question 3. This covered a tool to project retirement benefits to a future date. The question involved largely knowledge and understanding with only some judgment involved.

Question 2 on pension scheme risks, and question 5 on the trend from DB to DC were both answered reasonably well by almost half the candidates.

Question 4 was wordy, encouraging candidates to consider DB funding in an abstract way. Many candidates were able to get a good proportion of the marks though most fell short of the pass mark.

Question 1 covered executive options and the Black & Scholes valuation method. This was generally answered poorly, with only 3 students achieving a pass. Question 1 was worth 10 marks (i.e. less than 10% of the weighted score.)

Course 10 – Commercial Actuarial Practice

The Commercial Actuarial Practice (CAP) Course was conducted for the seventh time in Semester Two 2008. The overall assessment was focused on the practical application of judgement and on the communication skills of the students, rather than on bookwork.

There are two separate pieces of assessment. The first assessment is based on participation in a one-week residential course and on completion of a case assessment in one of the traditional areas of actuarial practice on the last day of the residential course. The second assessment is a 2-hour examination on non-traditional areas of actuarial practice. Students are required to pass each of these assessments in order to pass the Module. Students who fail one or both of these assessments may be permitted to resit the assessment(s) they failed without completing the whole course again.

The pass rate for the case assessment was 68.5% with the rate for candidates who presented for the examination being 95.2%. In total for the candidates who presented for one or both of the assessments, the overall pass rate is 71.3%. This is up on the three previous semesters of 49%, 67% and 57% respectively (the most recent being first). The case study pass rates varied considerably by subject, with Life Insurance and Investments both being 82%, down to GRIS at 20%. For the exam the pass rates were considerably higher for ERM at 98%, down to 73% for Health.

At this time no analysis has been done to find possible reasons for the higher overall pass rate. One possible cause may be that there are more candidates who have passed earlier Modules attempting CAPS this Semester than in previous Semesters. The Course Leader will be investigating this and other possible causes.

2.8   Comments on Candidates' Assignment Performance

As the Chief Examiners were unable to review candidates' assignments, no comments on assignment performance can be provided.

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3. Results

3.1 Pass Standards

The standards for determining whether a candidate should be granted the status of Fellow of the Institute of Actuaries of Australia are based on whether an individual demonstrates core capabilities required for an actuary practicing professionally in their specialty area(s). Candidates are required to demonstrate:

- a strong knowledge of the nature, operations, legislation and current issues of the selected practice area(s)
- a detailed knowledge and understanding of the application of actuarial concepts and skills to the chosen practice area(s)
- an ability to apply judgement to solve problems in the chosen practice area(s) that may be characterised by complexity, varying degrees of clarity of definition and novel or unseen circumstances.

A candidate is not expected to demonstrate these capabilities at the level of an experienced and skilled practitioner. It is unreasonable to expect candidates to demonstrate the degree of understanding of an actuary of some year's experience. Rather, the benchmark is whether the candidate is proficient to commence practicing professionally in their specialty area(s). Provided the candidate shows a grasp of the main principles, a pass should be awarded. Conversely, a candidate who demonstrates dangerous misconceptions or misapplication of concepts or ideas is viewed more seriously than a candidate who shows a simple lack of knowledge.

The Chief Examiners in the Part III Courses place greater emphasis on the questions that require the candidate to demonstrate the ability to apply bookwork to specific situations and show judgement to solve problems. When grading borderline candidates, their ability to do well in such questions has a greater bearing on whether they pass or fail. The Chief Examiners however, are very conscious of the fact that it is unreasonable to expect candidates to demonstrate the degree of understanding of an actuary with years of experience. In addition, actuaries are expected to be able to demonstrate their skills to those outside the profession. Candidates are expected to be able to communicate clearly and may be penalised if their answers are not clearly expressed.

3.2 Candidates' Results

Candidates' results in each subject and at each level are set out in the attachments to each Chief Examiner's report. In summary the results are:

Table 6: Recommended Candidate Passes by Part III Course

	Subject	2006 (1)	2006 (2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments	45	46	56	69	59	61
2A	Life Insurance	17	14	18	21	21	32
2B	Life Insurance	8	13	8	14	14	21
3A	General Insurance	28	25	24	17	36	21
3B	General Insurance	24	16	23	21	16	23
4A	Superannuation & P.S.	6	3	7	n/a	n/a	n/a
4B	Superannuation & P.S.	n/a	4	-	7	n/a	n/a
5A	Invest. Mngmt & Finance	7	8	6	n/a	17	n/a
5B	Invest. Mngmt & Finance	6	4	-	15	n/a	11
6A	Global Retirement Income Systems					11	n/a
6B	Global Retirement Income Systems						10
10	Comm. Actuarial Practice	14[1]	30	35[2]	47[3]	41[4]	62[5]
	Total	**156**	**163**	**177**	**211**	**215**	**241**

1 CAP had 30 overall passes. out of 47 candidates presenting. It had 28 passes out of 44 candidates presenting for the case study and 38 passes out of 43 presenting for the exam.
2 61candidates, 35 passes in the course (including case study and/or exam)
3 70 candidates, 47 passes in the course (including case study and/or exam)
4 83 candidates, 41 passes in the course (including case study and/or exam)
5 87 candidates, 62 passes in the course (including case study and/or exam)

Table 7: Recommended Pass Rates by Part III Course

	Subject	2006(1)	2006(2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments[1]	28%	31%	33%	42%	39%	51%
2A	Life Insurance	32%	28%	34%	39%	34%	48%
2B	Life Insurance	32%	41%	22%	33%	39%	42%
3A	General Insurance	42%	38%	38%	21%	52%	41%
3B	General Insurance	50%	39%	48%	48%	40%	37%
4A	Superannuation & P. S.	50%	38%	47%	n/a	n/a	n/a
4B	Superannuation & P. S.	n/a	57%	-	44%	n/a	n/a
5A	Invest. Mngmt & Finance[2]	50%	44%	35%	n/a	49%	n/a
5B	Invest. Mngmt & Finance[3]	43%	27%	-	34%	n/a	31%
6A	GRIS					58%[3]	n/a
6B	GRIS					n/a	56%[5]
10	CAP – Case Study	73%	64%	66%	75%	65%	68%
10	CAP – Exam	78%	77%	76%	86%	73%	95%
	Total	**37%**	**38%**	**38%[1]**	**41%[2]**	**44[4]%**	**49%[6]**

1 Based on CAP results of 61candidates, 35 passes in the course (including case study and or exam) = 57%
2 Based on CAP results of 70 candidates, 47 passes in the course (including case study and or exam) = 67%
3 6A GRIS –new course Semester 1 2008.
4 Based on CAP results of 83 candidates, 41 passes in the course (including case study and or exam) = 49%
5 6B GRIS –new course Semester 2 2008.
6 Based on CAP results of 87 candidates, 62 passes in the course (including case study and or exam) = 54%

The Chief Examiners aim to produce a consistent standard of passing candidates, rather than a consistent pass rate from year to year. This semester, the recommended overall pass rate of 49% is slightly above the range achieved in recent years of 37% - 44%. The overall pass rate is in line with last semester with the latest results as a whole boosted once

again by the strong results in Course 10 CAP of 68% for the Case Study and 95% for the Exam. However, excluding the CAP results the overall pass rate would have still been 44%.

The pass rate for Course 10, Commercial Actuarial Practice (CAP), of 71% overall and 68% for the Case Study and 95% for the exam was significantly higher than the average pass rate for Modules 1-3 of 44%. We believe that this is due to the following factors:

- CAP is a fundamentally different subject to those in Modules 1-3. It is undertaken as a one-week taught residential course, rather than as distance education, and has two assessment pieces, that is, the case study and the exam.
- CAP is undertaken by more experienced candidates that are generally closer to final qualification. These candidates would be expected to achieve a higher pass rate than the average rate across all candidates.
- Each assessment piece was double marked and then reviewed by the CAP Chief Examiner. To ensure consistency across the different subjects, one of the markers marked all case studies and all exams.
- CAP will be compulsory to all Part III students once transition ends. Any fundamental differences between CAP and Modules 1-3 will impact equally on all students.

The Board agreed that the standard applied to marking the exams for all subjects was ultimately the same as in previous years.

Further detail on the deliberations of each Chief Examiner is contained in their individual reports. I am satisfied that the processes adopted in the marking of papers and grading of exam papers have been fair and robust. The single marking of assignments may have led to some discrepancies among candidates, though due to the relatively few candidates whose results were changed by their assignment result (partly as a result of the reduced weighting given to assessments), this would not have had a big impact overall. Every effort has been made to ensure consistency between years and between subjects.

3.4   Pass Rates by Centre
The pass rates by exam centre were as follows:

Table 8: Comparison of Pass Rates by Centre

	2005(1)	2005(2)	2006(1)	2006(2)	2007 (1)	2007 (2)	2008 (1)	2008 (2)
Sydney	33%	43%	36%	42%	40%	45%	47%	55%
Melbourne	33%	30%	38%	37%	50%	44%	50%	45%
Other*	21%	19%	39%	25%	34%	29%	43%	44%
Total	30%	34%	37%	38%	38%[1]	41%[2]	47%[3]	51%[4]

* Other Australian and overseas exam centres
1.   Number incorporates only 49 CAP students sitting the exam out of a total of 61 candidates
2.   Number incorporates only 57 CAP students sitting the exam out of a total of 70 candidates
3.   Number incorporates only 70 CAP students sitting the exam out of a total of 83 candidates
4.   Number incorporates only 63 CAP students sitting the exam out of a total of 87 candidates

I have examined the pass rates by specialist subject and examination centre. This analysis revealed a number of interesting features, including:

- The overall pass rate for non-Sydney/Melbourne examination centres is considerably lower than the overall pass rate for the Sydney/Melbourne examination centres (43% compared with 53%). The difference between Sydney/Melbourne and other centres was also marked in Semester 2 2007
- The pass rate in Sydney, the largest centre with 64% of all candidates, was 55% this semester.
- In New Zealand only 3 candidates from 8 attempts passed (38%).

- Singapore was the largest overseas centre (previously Hong Kong). There were 9 passes from 19 attempts (47%).

3.5 Pass Marks and Scaling

The scaled pass marks for 2006 Semesters one and onward, out of 200 marks have been as follows:

Table 9: Scaled Pass Marks by Part III Course

	Subject	2006 (1)[4]	2006 (2)[4]	2007 (1)	2007 (2)	2008 (1)	2008 (2)
1	Investments	103	120	121	90[1]	100	100
2A	Life Insurance	114	122	115	123	123	123
2B	Life Insurance	119	124	111	110	110	117
3A	General Insurance	116	113	111	113	115	120
3B	General Insurance	115	118	120	120	120	120
4A	Superannuation & P.S.	122	127	120	-	n/a	n/a
4B	Superannuation & P.S.	n/a	128	-	122	n/a	n/a
5A	Invest. Mngmt & Finance[2]	120	102	100	-	120	n/a
5B	Invest. Mngmt & Finance[3]	120	123	-	121	n/a	120
6A	Global Retirement Income Systems					120	n/a
6B	Global Retirement Income Systems					n/a	115
10	Comm. Actuarial Practice[1]	50 - 50	50 - 50	50-50	50-50	50-50	50-50

1   For CAP, the case study and the exam each had a pass mark of 50%.
2   Grossed up from 45/100 for consistency with historic data

The relationship between scaled and raw marks for 2008 Semester Two was:

Table 10: Raw and Scaled Pass Marks by Part III Subject

	Subject	Raw	Scaled
1	Investments	90	100
2A	Life Insurance	115	123
2B	Life Insurance	103	117
3A	General Insurance	100	120
3B	General Insurance	100	120
5B	Investment Management and Finance	100	120
6B	Global Retirement Income Systems	116	115

Consistent pass criteria have been used for all subjects. The criteria are:

- the scaled mark
- a grade point average of around 2.5
- number of questions passed being "50% of questions + 1, rounded down" e.g. pass 4 from 6 questions; pass 4 from 7 questions or pass 3 from 5 questions.
- no more than 1D and no E grades.
- borderline candidates are to be assessed carefully, with the examiners re-marking their papers, as in previous years.
- assignments were included in the assessment process, being weighted at 15% of the overall assessment.

The range of scaled marks in Semester Two 2008 was 100-123 out of 200, a range of 23 marks. This was the same range as in Semester One 2008.

It should be noted that, as discussed above, the scaled mark was not the sole factor used to determine whether a candidate passed or did not pass.

3.6   Andrew Prescott Memorial & Katherine Robertson Prizes

In December 1978, Council agreed to establish the Andrew Prescott Memorial Prize, in honour of the late Andrew Prescott, for meritorious performance in the Institute's examinations. Prizes are awarded in two divisions:

- Prizes for the highest mark in the examination in each Part III subject provided a certain minimum standard is attained.
- A prize for outstanding performance over the whole examination process on completing the Fellowship.

Since 2001, the Katherine Robertson Prize has been awarded for General Insurance in lieu of the Andrew Prescott Memorial Prize. Katherine Robertson was an outstanding young actuary working in General Insurance who passed away in October 2000.

Subject Prizes

Prizes are awarded only once in a calendar year following the Semester Two examinations.

Subject Prizes
Each subject prize is awarded based on the performance of candidates in both semesters. The minimum standard for a subject prize has been set at 120% of the pass mark for both subjects. In addition, the candidate must have achieved A grades in at least 50% of questions in both exams.

The Board of Examiners recommends that subject prizes only be awarded for Course 1 Investments, Life Insurance and Commercial Actuarial Practice as there were no eligible candidates in other subjects.

3.7   Fellows

The Part III Examination transition period from the pre-2005 system to the new post-2005 system ended at the end of 2007. So that students in transition (i.e. those who have passed at least one paper of a pre-2005 subject) would not be disadvantaged, a variation on the new pathway was approved in 2006. There are two ways in which candidates can qualify as Fellows.

(iii) Candidates must pass Module 1 (Investments), one full specialist subject (Modules 2 and 3) and Module 4 (Commercial Actuarial Practice).
(iv) Candidates in transition (ie. those who have completed at least one paper of a pre-2005 subject) must pass three Modules and Module 4 (Commercial Actuarial Practice), providing that the equivalent of Modules 2 and 3 in one special area have been completed.

If the Council adopts the recommended passes, the number of members that will be made Fellows (subject to attendance at a Professionalism Course, satisfying the Practical Experience Requirement and paying any relevant exemptions) will be:

Category	2008(2)	2008(1)	2007 (2)	2007 (1)	2006 (2)	2006 (1)
Pre-2005 system	0	0	1	1	7	14

Post-2005 system	71**	37*	41	32	25	10
Total New Fellows	**71****	**37***	**42**	**33**	**32**	**24**

* 38 candidates completed all the Part III exams in semester one 2008 but one of these candidates had not completed all Part I exams. This candidate completed their last Part I exams in September 2008.

** 72 candidates completed all the Part III exams in semester two 2008 but one of these candidates had not completed Part II.

4. Recommendations for Semester One 2009

4.1   Board of Examiners

The recommended constitution for the Board of Examiners for Semester One 2009 is as follows:

Chair and Assistants

Chair	Ms Caroline Bayliss
Assistant Chair	Mr Wesley Caine
Assistant Chair	Ms Raewin Davies
Assistant Chair	Ms Catherine Robertson-Hodder
Assistant Chair	Mr Mike Fowlds

Chief Examiners

Course 1:	Investments	(external examiner TBC)
Course 2A:	Life Insurance	Mr Anthony Brien
Course 2B:	Life Insurance	(staff actuary – Chris Johns)
Course 3A:	General Insurance	Mr David Gifford
Course 3B:	General Insurance	Mr Adam Payne
Course 5B:	Investment Management & Finance	(external examiner Jackie Li)
Course 6B:	GRIS	Mrs Debra Lewis
Course 10:	Commercial Actuarial Practice	TBC

One or two of the Assistant Examiner positions are yet to be confirmed for Semester One 2009.

4.2   Examination Dates

The dates for the examinations in Semester One 2009 are as follows:

Semester One 2009

Modules 2 (2A)	Life Insurance	Tues 28th April am
Modules 3 (3B)	General Insurance	Tues 28th April pm
Modules 2 (3A)	General Insurance	Wed 29th April am
Modules 3 (2B)	Life Insurance	Wed 29th April pm
Modules 2 (6A)	Global Retirement Income Systems	Thur 30th April am
Module 1	Investments	Mon 4th May am
Modules 3 (5B)	Investment Management & Finance	Tues 5th May am
Module 4 (10)	Commercial Actuarial Practice	Wed May 4th May am

4.3   Exam Solutions

The Board of Examiners has agreed to release the Semester Two 2008 examination papers along with the examination specimen solutions and marking guides. It is recommended that the 2008 Semester Two examination papers and exam solutions and marking guides be released on 18th December or as close to this time as possible.

C1 Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

134 Candidates enrolled for the Semester 2 2008, Investment Management exam. Of these, there were 9 candidates who withdrew from the course before the exam. There were 5 candidates who did not attend the exam. In total 120 candidates sat for the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 61 Candidates be awarded a pass, which implies a pass rate of 51% of those who attended the exam. This compares with a pass rate of 39% for the 2008, Semester 1 exam and 42% for the 2007 semester 2 exam.

This pass rate is a bit higher than it has been in recent times. Andrew Leung, the course leader for C1, advised that in his opinion, this semester's cohort of students is of higher quality than in previous semesters. This is supported by the fact that the assignment results are better this semester than last semester with 60% passing the assignment this time compared with 42% last time. Enrolments in C1 are significantly lower this semester than in the previous semester. We have anecdotal evidence that many students have put off enrolling in C1 this semester and intend to enrol in it next year when the course is being outsourced to Macquarie University. Presumably this is because they believe their prospects of passing will be better then. That suggests that weaker students have deferred enrolling in C1 till next year.

Pass rates in recent sessions are as follows:

Year	Semester 1	Semester 2
2008	39%	51%
2007	33%	42%
2006	28%	31%
2005	24%	29%

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	134
Withdrawn prior to exam	9
Absent from exam	5
Presented at exam	120
Passed	61
Failed	58

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass rate
Auckland Exam Centre	1	0	0.0%
BEIJING	1	0	0.0%
Canberra Exam Centre	5	3	60.0%
HONG KONG	2	1	50.0%
KUALA LUMPUR	2	1	50.0%
London Exam Centre	2	1	50.0%
Melbourne Exam Centre	18	5	27.8%
SEOUL	1	0	0.0%
SHANGHAI	1	0	0.0%
SINGAPORE	4	2	50.0%
Sydney Exam Centre	82	48	58.5%
Tianjin	1	0	0.0%

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: Timothy Kyng

Assistant Examiners: Ren Lin
                          Stuart Crockett

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

Question	Units	Knowledge & Understanding	Straight-forward Judgement	Complex Judgement	Total Marks
1a	BM	3			3
1b	BM		3		3
1c	BM			3	3
1d	BM	2			2
1e	BM		3		3
1f	BM		3		3
1g	BM, 1			3	3
2a	1		3		3
2b	1		4		4
2c	1	3			3
2d	1			10	10
3a	1		4		4
3b	1		2		2

3c	1			4	4
3d	1			4	4
3e	1		4		4
3f	1	2			2
4a	2	5			5
4b	2			3	3
4c	2		8		8
4d	2			4	4
5a	2	3			3
5b	2		2		2
5c	2			4	4
5d	2			4	4
5e	2		4		4
5f	2		3		3
TOTAL		18	43	39	100

(*) BM means background material to the course

3.6. Question by Question Analysis

Question 1:

This question covered the "background material" to the course and was about inflation, its causes, its management and its investment implications. Question 1 was the third most difficult question as measured by the proportion passing (44%) and the average raw mark (42%) for the question. The average cutoff mark recommended for a pass was 9 out of 20, reflecting the markers' view that it was a relatively difficult question.

Overall, this question was not particularly well answered. With no calculations or equations, this question demanded that candidates show a good qualitative understanding of monetary policy, inflation and the links to other economic factors and variables. There appeared to be a significant lack of knowledge about economic fundamentals, and in a number of cases, very little ability to move beyond the political and journalistic jargon that abounds on this topic. Too many answers focussed solely on demand or economic growth, and indicated an idea that inflation and economic growth were closely correlated.

a) A question on the suitability of an inflation target for monetary policy. This question demanded knowledge of the possible approaches to monetary policy, the objectives of the RBA, and the causes of inflation. This question was generally interpreted correctly, with several good responses. However, many students did not seem to be able to articulate the reasons for the choice of an inflation target, in the context of the other approaches the RBA could take.

b) A question on the causes of inflation. This question was mis-interpreted by many students, who interpreted the question in the context of the current breakout of inflation, and the drivers of this.

The overarching understanding of the students was that inflation is caused by economic growth and a 'resources boom' or similar. Very few students indicated an understanding of the interaction between supply and demand growth. Most were able to get marks for inflation caused by rising input prices, if only through reference to oil prices or the resources boom.

Marks were given where answers were targeted at the current level of inflation, rather than inflation as a concept.

c) A question on why the inflation target was not achieved at particular times since 1996. The question tended to be interpreted correctly. However, most students were not able to

provide concrete examples of where inflation went outside the RBA's target range with corresponding reasons. No marks were given for answers which made vague reference to the 'resources boom' or 'oil prices' without specific explanation of the causality.

d) A question on how the RBA attempts to achieve the inflation target. This question was quite well answered, with most students showing an understanding of the RBA's use of open market operations. However, the flow-on effects were often not well understood. Almost no students gave an answer referencing the impact of interest rates on the exchange rate.

e) A question on the limitations of monetary policy. Most students were able to grasp that inflation can be driven by factors that are outside the RBA's control. Many gave answers referring the monetary policy as a blunt instrument or having a lagged effect, which was given up to one mark.

f) A question on other ways of controlling price inflation. This question was interpreted correctly and most answers given closely followed the model solutions. A number of students gave answers in which a number of points were variations on the same theme, such as fiscal policy. These were only given one mark.

g) A question on inflation expectation and inflation-linked liabilities. Most students seemed to believe that inflation was mean-reverting given the RBA's objectives, and didn't grasp that the question was focussed not on where inflation would actually move in the future, but where it was 'expected', which can be quite different.

No student made reference to real interest rates, and consequently the most marks given in this question was 2 out of 3.

Question 2:

This question was about liquidity crises and credit crises and what distinguishes one from the other. It also covered the modeling of liquidity and credit risks, what are illiquid assets and how these illiquid assets might be modeled in an asset liability study. This question was the one the students performed best on, with an average raw mark of 54% and 63.3% of the candidates passing the question. The average cutoff mark for a pass as recommended by the markers was 11.5 out of 20 and we adopted 11 out of 20 as the cutoff mark. This cutoff mark produced the same proportion of passes overall as was recommended by the markers. Performance on this question was relatively good with 80% of candidates getting at least a C grade. Part (ii) of the question, about the modeling of credit and liquidity risks, was the part the students had the most difficulty with. The other parts of the question were handled quite well.

Question 3:

Students generally performed poorly on this question. The more lenient marking pair recommended only 22% of candidates pass the question and the stricter marking pair recommended only 8% of candidates pass. I think this is definitely too harsh and I have modified the cutoff marks so that the top 30% of candidates get a pass on the question.

The question was about asset modeling, asset allocation, broad asset classes and market efficiency and capm as theoretical basis for this. The question was also about switching to a "finer grained" classification of asset classes based on business sectors and debt / equity and how capm might be adapted to facilitate asset allocation decisions with this alternative classification of asset classes.

After scaling and modifying the grade distribution cutoffs recommended by the markers, the results are an average scaled mark of 45%, an average raw mark of 33% and a proportion passing of 33%. I shall not repeat the question here, but the following general comments about how the question was handled are relevant:

Part (a): Few candidates mentioned an economic or financial theory justification, though the question specifically asked for it. Many candidates mentioned that different factors affected different industries. This is correct but not relevant to this part of the question.

Part (b): Many candidates simply listed the standard CAPM formula without explaining how it could be used to implement the alternative approach. For those who made an attempt, many suggested that the market portfolio should become the sector portfolio containing all stocks in the sector. This shows poor understanding of the question and CAPM.No candidate mentioned the unsystematic, random error.

Part (c): Many candidates listed the standard limitation of CAPM (no tax and transaction costs allowed for, market portfolio cannot include stocks within the whole universe, investors are rational, market efficiency,…etc) without relating back to the question. Only a few candidates mentioned extending CAPM (essentially a single-factor model) to multi-factor model. Only a few candidates point out that CAPM is a single period model and for the super fund, it requires a multi-year projection

Part (d): The question was a bit vague and thus candidates gave a wide range of answers. Generally, given the question asks for financial factors, interest rate, inflation, GDP, tax and legislation were common answers from the candidates. No candidate mentioned any factors included in the sample answer.

Part (e): Only a few candidates considered selecting the most efficient asset allocation among all the possible allocation mix. Many candidates stop at when the objective is met. Not all the candidates mentioned how "inflation-link" relates to their answer. Most of the candidates answered "model the investment return and the inflation consistently".
Only a few candidates considered the investor cash flow.

Part (f): Many candidates mentioned the use of derivatives and other instruments to slow shift exposure to the desired sectors. Some mentioned tax and transaction costs and that mass buying and selling were not recommended. Some candidates went into details on how to choose stocks within a sector. The above comments clearly showed little understanding of the question by most candidates. Only some candidates mentioned passive/active approach in implementing the asset allocation.

Question 4:

This question was about "investment styles" and the possible use of a statistical technique called "cluster analysis" for classification of investment manages into "styles" based on analysis of their past performance. To use cluster analysis requires the user to specify a "metric" to measure the degree of similarity of the historic performance of investment managers.

The markers recommended a cutoff of 10 out of 20 for a pass on the question and we adopted that recommendation. Overall 51.7% of the candidates passed the question and the average raw mark was 46% and the average scaled mark was 54%. The question overall was not difficult relative to the others.

Parts a and d were fairly straightforward and it was possible to pass the question overall with a fairly modest answer to c. However, c was the biggest part of the question and the part that required most thought and judgment and was part of the question that most differentiated between students.

Most students were able to gather good marks in part a) which was very straight forward and this helped those students who did obtain a pass overall for the question. The parts of the question that were more complicated were generally not done well and often the more

obvious points relating to the simplicity of the Metric were missed and more broader and less relevant answers were provided instead. Students were still able to gather enough marks to achieve a pass - but most passes were border line reflecting that the easier marks were generally picked up.

Specific comments:

Part (a) was generally well understood and well answered, although many candidates gave a very vague or simplistic explanation of the theory (eg value investors invest in assets with a low PE ratio, value investors invest in stocks which are cheap).

Part (b) was well understood overall but some candidates discussed the measure generally rather than focussing on its use for style classification. Overall it was poorly answered. Several candidates missed key points and got hung up on minor/irrelevant points such as whether data was accurate rather than whether the measure would be useful. Many candidates used far too many words to explain a few points and did not make enough distinct points.

Part (c)of the question seemed well understood, but answers were of mixed standard, with several candidates failing to compare cluster analysis to traditional methods. Many candidates thought the data requirements were intensive/onerous compared with traditional methods, and many made generalised statements without explaining their relevance to the question.

Part (d) Seemed to be well understood but poorly answered overall with many candidates obviously running out of time.

Question 5:

This question was about a commodity exchange (the LME) and the use of commodity options and futures for risk management by a user of a commodity (copper).

This was the most poorly answered question on the exam with the lowest average raw mark, lowest average scaled mark (44.7%) and lowest proportion passing the question (29.2%).

The markers recommended a cutoff of 10 out of 20 for a pass but the examiners decided to make it 9 out of 20 as it was a difficult question for the students. This pushed the proportion passing the question up from 20% to 30%. The wording of many parts of the question was a bit open ended. The chief examiner formed the view the markers had been a bit harsh in judging the students' answers to this question.

Part (a) was generally well answered although most students missed one to two major features of either options or futures which caused some marks to be lost.

In part (b), most students managed to mention at least one relevant alternative and their limitations.

In part (c) a lot of students answered the question "Explain the advantages to the investor..." rather than "Explain the advantages to the LME...". Accordingly they did not answer what the question asked. This caused the low marks awarded relative to the number of marks available for this part.

In part (d) a lot of students misunderstood the question, giving an answer as to how to determine the exposure of a derivative instead of how to measure the exposure of the firm to copper. Accordingly they mis-intrepeted the question and lost marks as a result.

In part (e), not many students could provide more than 1 correct way to hedge FX exposure.

In part (f), many students wrote down the features of the options and futures contracts but did not consider under what situations the features of the options are more suitable than those of the futures. Thus they did not really answer what the question asked. Marks were not awarded for simply stating the features of the option or futures contract. This was awarded in part (a) already. As a result, most students did poorly in this part as they failed to apply it to the situation.

2A Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

68 Candidates enrolled for the Semester 2 2008, 2A Life Insurance exam. Of these, 1 did not present at the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 32 Candidates be awarded a pass, which implies a pass rate of 48% (of those sitting the exam). This compares with a pass rate of 34% for the 2008, Semester 1 exam.

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	68
Withdrawn prior to exam	2
Absent from exam	0
Presented at exam	66
Passed	32
Failed	34

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Sydney	36	22	61%
Melbourne	15	6	40%
Sub-total Australia	51	28	55%
Singapore	5	2	40%
Hong Kong	4	0	0%
London	1	1	100%
Auckland	1	0	0%
Malaysia	1	0	0%
Other	3	1	33%
Sub-total Overseas	15	4	27%
Total	66	32	48%

Compared to last semester the overseas pass rate has deteriorated from 38% (6 out of 16) to 27% (4 out of 15) and now stands around half of the Australian pass rate which has increased from 33% to 55%.

2. Examination Administration

2.1. Examiners

The examiners for this semester were:

Chief Examiner: Ian Werner
Assistant Examiners: Anthony Brien
                       Gary Musgrave

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

Question	Units	Knowledge & Understanding	Straight-forward Judgement	Complex Judgement	Total Marks
1a	1		3		3
1b	1,2	4			4
1c	1,2,3,4		6		6
1d	1,2			4	4
1e	2	3			3
2a	1,2,3		4		4
2b	1,3	5			5
2c	1,2		6		6
2d	1,2			5	5
3a	2,3	3	2	1	6
3b	1,2,3		3	6	9
3c	1,3,4		2	3	5
3d	1,2,4			5	5
4a	1,2,5	4			4
4b	2,3,4,5		5	2	7
4c	1,3			7	7
5a	2		3	2	5
5b	2,3		7		7
5c	2,3			5	5
TOTAL		19	41	40	100

Table 4 – Course Coverage

Question	Units	Knowledge & Understanding	Straight-Forward Judgement	Complex Judgement	Total Marks
1	1,2,3,4	7	9	4	20
2	1,2,3	5	10	5	20
3	1,2,3,4	3	7	15	25
4	1,2,3,4,5	4	5	9	18
5	2,3	0	10	7	17
Total		19	41	40	100

Based on the table above, all five questions have similar spread of KU, SJ and CJ type marks, hence similar degree of difficulty.

3.4.   Overall Performance

Overall the exam paper acted as a reasonable discriminator, with raw marks (including the assignment) ranging from 55.2 to 138.5 (excluding the candidates who did not present for the exam). This was an equivalent range to that achieved in the previous semester. Overall student performance was significantly better than in the previous semester.

3.6. Question by Question Analysis

Question 1	Marks required	% of total marks	Number of candidates	Percentage of candidates
Strong Pass	30.0	75%	7	11%
Pass	25.1	63%	29	44%
Slightly Below Standard	18.0	45%	28	42%
Weak	12.0	30%	1	2%
Showed Little Knowledge	0.1	0%	1	2%
No Attempt	0.0	0%	0	0%

Maximum mark	32.0
Average mark	25.4
Standard Deviation	3.8

Question 2	Marks required	% of total marks	Number of candidates	Percentage of candidates
Strong Pass	27.5	69%	4	6%
Pass	20.5	51%	28	42%
Slightly Below Standard	13.0	33%	32	48%
Weak	8.0	20%	1	2%
Showed Little Knowledge	0.1	0%	1	2%
No Attempt	0.0	0%	0	0%

Maximum mark	29.4
Average mark	19.8
Standard Deviation	4.3

Question 3	Marks required	% of total marks	Number of candidates	Percentage of candidates
Strong Pass	38.0	95%	3	5%
Pass	29.5	74%	26	39%
Slightly Below Standard	24.0	60%	12	18%
Weak	14.5	36%	18	27%
Showed Little Knowledge	0.1	0%	7	11%
No Attempt	0.0	0%	0	0%
Maximum mark	44.5			
Average mark	26.2			
Standard Deviation	8.7			

Question 4	Marks required	% of total marks	Number of candidates	Percentage of candidates
Strong Pass	24.1	60%	4	6%
Pass	18.6	47%	31	47%
Slightly Below Standard	11.0	28%	29	44%
Weak	6.0	15%	2	3%
Showed Little Knowledge	0.1	0%	0	0%
No Attempt	0.0	0%	0	0%
Maximum mark	28.0			
Average mark	18.5			
Standard Deviation	4.0			

Question 5	Marks required	% of total marks	Number of candidates	Percentage of candidates
Strong Pass	21.5	54%	4	6%
Pass	16.5	41%	26	39%
Slightly Below Standard	12.5	31%	25	38%
Weak	8.0	20%	7	11%
Showed Little Knowledge	0.1	0%	4	6%
No Attempt	0.0	0%	0	0%
Maximum mark	25.5			
Average mark	15.5			
Standard Deviation	4.2			

2B Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

54 Candidates enrolled for the Semester 2 2008, Life Insurance 2B exam. All of the 50 candidates presented at the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 21 candidates be awarded a Pass, which implies a pass rate of 42%. This compares with a pass rate of 39% for the Semester 1 2008 exam.

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	54
Withdrawn prior to exam	4
Absent from exam	0
Presented at exam	50
Passed	21
Failed	29

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Sydney	27	12	44%
Melbourne	6	2	33%
Subtotal: Australia	33	14	42%
Fiji	1	0	0%
Hong Kong	6	4	67%
New Zealand	3	2	67%
Malaysia	1	0	0%
South Korea	1	0	0%
Switzerland	1	1	100%
Taiwan	1	0	0%
United Kingdom	3	0	0%
Subtotal: International	17	7	41%
Total	**50**	**21**	**42%**

2. Examination Administration

2.1. Examiners

The examiners for this semester were:

Chief Examiner: Andrew Gill

Assistant Examiners: Damian Thornley
                       Aaron Bruhn

From a continuity perspective, Andrew Gill and Damian Thornley were the continuing members of the examination team from last semester.

The Course Leader prepared drafts of the exam and the Chief Examiner and other course leader (Alan Udell) spent significant time reviewing the exam.

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

	Aims	KU	SJ	CJ	Total
1a	1, 2	2			2
1b	1, 9	3			3
1c	2		7		7
1d	2			5	5
2a	10	2			2
2b	1, 3		3		3
2c	1, 11		5		5
2d	4, 9, 11			5	5
3a	4, 9	4			4
3b	2		5		5
3c	2, 4, 12			8	8
4a	1, 2	3			3
4b	7, 8		6		6
4c	7, 8, 12			8	8
5a	4, 11, 13	3			3
5b	4, 12, 13		3		3
5c	4, 9, 13			8	8
5d	4, 12, 13			3	3
6a	5	2			2
6b	2		2		2
6c	5, 11		5		5
6d	4, 5, 9			8	8
		19	**36**	**45**	**100**

Table 4 – Course Coverage

Question	Aims	Knowledge & Understanding	Straight-Forward Judgement	Complex Judgement	Total Marks
1	1, 2, 9	5	7	5	17
2	1, 3, 4, 9, 10, 11	2	8	5	15
3	2, 4, 9, 12	4	5	8	17
4	1, 2, 7, 8, 12	3	6	8	17
5	4, 9, 11, 12, 13	3	3	11	17
6	2, 5, 4, 9, 11	2	7	8	17
Total		19	36	45	100

Table 6 – Pass Rates

	Q1	Q2	Q3	Q4	Q5	Q6
Pass	48%	40%	54%	40%	44%	32%
Fail	52%	60%	46%	60%	56%	68%

3.4. Overall Performance

Overall, the performance on this exam was similar to that of last semester. As detailed in the following sections, there were some questions that were answered reasonably, and others that were not answered well.

As usual, many candidates clearly did not allow sufficient time to complete each question. Consequently, many marks were lost due to poor, rushed responses to the last two questions of the exam.

It was clear from the marking that there were several examples of candidates who spent significant amounts of time trying to attain A grade answers to some questions at the expense of time allocated to other questions. One borderline candidate who had a very high mark was close to failing despite having 2 very high A's as they clearly left insufficient time to complete the remaining questions.

3.5. Question by Question Analysis

Question 1 (12 marks)

This question covered some of the fundamental areas of actuarial valuations including the use of best estimate assumptions, how IBNR effects profit reporting and potential issues in reconciling earned and actual premiums. In addition, candidates were required to detail the likely effects on CICP of an impending recession and the move toward age 65 GSC benefits.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	25.0	73.5%	3	6.0%
Pass	20.0	58.8%	21	42.0%
Slightly Below Standard	16.5	48.5%	18	36.0%
Weak	11.0	32.4%	7	14.0%
Serious Lack of Knowledge	0.1	0.3%	1	2.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			50	
Maximum Mark	27.5			
Average Mark	19.4			
Standard Deviation	3.9			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 34).

Markers' Comments

This was a reasonably straightforward question dealing with Group Risk business reserving methodology.

Overall, the question was answered reasonably well but a few points were missed by the vast majority of the candidates. A number of candidates seemed to forget that this was group business and appeared to put down irrelevant information on individual business.

Part (a) – 2 Marks.

Part (a) was reasonably straightforward, but it is surprising the number of candidates who missed the obvious point that IBNR, RBNA and CICP needed Best Estimate Assumptions (with even fewer mentioning what those assumptions were). Some just stated the reserves required without attempting to answer the question. Some candidates went into a standard discussion on DAC but some of those did admit it was small for group business.

Nearly all candidates said that best estimate assumptions were needed because you had to prove that the accumulation method gave a reserve at least as big as that using a projection method.

Part (b) – 3 Marks.

Part (b) had two parts to it but most candidates only answered one part, namely the impact of misestimating the IBNR on profits. Not many candidates mentioned using industry statistics to derive the IBNR. It was very easy to achieve two marks for this question by mentioning the impact on total profit and timing/experience profits.

Part (c) – 7 Marks.

A large number of candidates suggested that the 15% difference could occur if there was a large volatility in premiums over the year. Many candidates appeared not to have a good understanding of how to calculate a UPR. Extra credit was given for any reasonable points that were made, in particular any reference to sensible checks and investigations.

Part (d) – 5 Marks.

Part (d) was probably answered the best, despite being a Complex Judgement question, (average of 3.2/5) with most candidates getting close to full marks in the second part. For the first part, nearly all candidates identified the impact on CICP reserves with varying answers as to the subsequent impact on profits. Very few candidates mentioned volatility, asset-liability mismatch issues or expense issues.

Most candidates were awarded two marks for noting the recessionary impacts on claims incidence and terminations. Part (d) (ii) were quite topical (particularly given recent events) and consequently most candidates were fairly familiar with the likely implications. Because of this, this part did not provide a significant degree of differentiation between candidates differentiate between candidates.

Question 2 (15 Marks)

This question related to an Australian life company issuing investment linked products in the Australian market. Questions (a) and (b) were simple questions regarding the reporting of investment linked policies (including considerations with regards to reporting of property investments). Parts (c) and (d) discussed an investment guarantee option that the company is providing to its customers.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	16.25	54.2%	3	6.0%
Pass	13.5	45.0%	17	34.0%
Slightly Below Standard	11.0	36.7%	16	32.0%
Weak	8.5	28.3%	10	20.0%
Serious Lack of Knowledge	0.1	0.3%	4	8.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			<u>50</u>	
Maximum Mark	21.0			
Average Mark	12.5			
Standard Deviation	2.9			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 30).

Markers' Comments

Part (a) – 2 Marks.

Many candidates fell short of addressing the CFO's question as it relates to the reasons for a difference of accounting treatment between funds management and life insurance. It was inadequate to barely state that ILL is obliged to comply with accounting standards, as that is equally applicable to a funds manager. Hence, while many students related the standards to "assets" and/or "liabilities", a lot fewer were able to explain the reasons for this.

Part (b) – 3 Marks

The average mark was 0.9. This is a reflection of the fact that while most candidates were able to state that the valuation was unlikely to be appropriate, many less went on to suggest how it might be adjusted (or even that it would need to be adjusted). Against this, very few students obtained marks for the second and third points in the solutions relating to appropriate valuation unit prices and recognition of any distortion, with the attendant issue of reserve for potential compensation.

Part (c) – 5 Marks

The average mark was 2.54. Clearly, most candidates were able to pick up some marks in this part, with few managing to cover all or most points well. The aspects that relate to increase in costs were commonly overlooked; and while many students included reference to the one-off fee, a lot fewer stated that it did not relate to acquisition costs as required by LPS 1.04.

Part (d) – 5 Marks

The average mark was 1.96. While most candidates were able to pick up some marks in this part, it was generally less well answered than part (c). Aspects relating to Target Surplus and a large counterparty exposure (and hence IAR effects) were often overlooked; and while many students included reference to "Cap Ad and/or Solvency Standards", these tended to be "buzz references" without mention of whether it related to applicability of the instrument or effectiveness under the standards. Although a number of students mentioned "stochastic modelling" (and may have been awarded one or at least a partial mark, depending on the contextualisation), many less were able to describe how this might apply to the testing of a range of different scenarios.

A minority of students commented on checking the credit rating of the provider, and especially their capacity to withstand the effects of severe financial downturns.

Question 3 (17 Marks)

This question relates to a company from South East Asia which issues traditional products which pay cash dividends. The company is looking to increase commissions and increase cash dividend payouts and the candidates were asked to present the potential effects of these changes on the company position.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	24.0	70.6%	4	8.0%
Pass	20.0	58.8%	23	46.0%
Slightly Below Standard	16.5	48.5%	16	32.0%
Weak	8.5	25.0%	7	14.0%
Serious Lack of Knowledge	0.1	0.3%	0	0.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			<u>50</u>	
Maximum Mark	25.0			
Average Mark	19.8			
Standard Deviation	3.2			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 34).

Markers' Comments

Part (a) – 4 Marks

Part a) was worth 4 marks, with an average mark of 2.5. The commission rate under the product was proposed to be increased from 100% to 200%. Candidates were asked to comment on the impact of profitability, future reported profits and capital.

Candidates had no trouble saying the profit over the life of the business would be expected to decrease and there would be an increase in new business strain. This was sufficient for 2 marks. A few candidates distinguished themselves by commenting that profitability could increase if sufficient new business was written to decrease expense unit costs.

Most candidates struggled to get the full mark available for impact on reported profitability and around 30% of candidates discussed the issue of loss recognition.

Candidates who failed to score at least 2 marks in this part struggled to pass the question.

Part (b) – 5 Marks

Part b) was worth 5 marks and the average score was 2.7. Candidates were asked for the considerations they would take into account in recommending an increase in the distribution rate.

80% of the candidates identified the points relating to solvency/financial security of the office and policyholder reasonable expectations. Half the candidates commented upon the equity issue between new and existing customers (although none mentioned that as it was a new and immature market the company would not be that old and therefore this would not be that material an issue).

Candidates needed to score 2.5 to 3 out of 5 to stay on track to pass the question.

Part (c) – 8 Marks

Part c) was worth 8 marks with two marks available for format and language and the average score was 4.7. In this part candidates were asked to comment on the proposal to offer an additional "one off" 2% dividend to those customers proposing to leave and offer alternatives to improve retention.

Most candidates commented on the ineffectiveness of the proposal and the lack of equity between customers. Around half the candidates then commented on policyholder expectations in the future. Most candidates failed to comment upon the impact on the financial security of the office.

A small group of candidates failed to read the question properly or forgot to comment upon both the proposal and alternatives. This made it difficult for these candidates to obtain the necessary marks to pass the question. Only one candidate failed to structure their answer in the appropriate format.

Most candidates came up with reasonable alternatives, format and language.

Question 4 (17 marks)

This question relates to an Australian life company who operates through the Independent Financial Advisor (IFA) market. Candidates were asked about the effect on Appraisal Value of a number of different scenarios including a proposal to sell business trough direct channels rather than the IFA market.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	22.5	66.2%	3	6.0%
Pass	18.0	52.9%	17	34.0%
Slightly Below Standard	14.0	41.2%	20	40.0%
Weak	7.0	20.6%	10	20.0%
Serious Lack of Knowledge	0.1	0.3%	0	0.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			<u>50</u>	
Maximum Mark	24.0			
Average Mark	16.4			
Standard Deviation	4.9			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 34).

Markers' Comments

Part (a) – 3 Marks

Many students did not address the actual question and instead simply paraphrased the requirements of LPS1.04 regarding the use of best estimate assumptions.

Part (b) – 6 Marks

Many students failed to obtain full marks here due to exam technique. The question required students to identify the impact of making various changes on AV. Students would correctly identify the impact which the change would have on the company but then fail to state what the impact on AV would be.

Many students also gave a very superficial answer to some components of the question without considering the issue in sufficient detail (for example stating that a change to level commission would reduce initial capital strain and have a beneficial impact, without considering that the PV of the two commission streams should be considered.)

Part (c) – 8 Marks

Many students defined the components of AV (often in some detail), which was not required by the question. Many students also assumed that the changes suggested in part (b) had been made when it came to part (c), which resulted in their answers being quite different.

Question 5 (17 marks)

The question details a company operating in the mythical country of Luranda which issues stepped premium life insurance and investment linked business (each written in a different statutory fund). Candidates were given the MRC position of the funds and asked to explain the differences (given the types of business in each statutory fund). The remainder of the question presented scenarios for which the candidate was expected to discuss the capital position of the company.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	22.0	64.7%	8	16.0%
Pass	18.0	52.9%	14	28.0%
Slightly Below Standard	14.0	41.2%	14	28.0%
Weak	10.0	29.4%	10	20.0%
Serious Lack of Knowledge	0.1	0.3%	4	8.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			<u>50</u>	
Maximum Mark	27.5			
Average Mark	16.5			
Standard Deviation	4.9			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 34).

Markers' Comments

Part (a) – 3 Marks

Part a) required knowledge of the relative magnitude of the various components of the capital adequacy requirement between a statutory fund of risk business and a statutory fund of investment linked business. The question was not particularly well answered. Many students went down the path of stating that the MRC reserve ratios differed because of the denominator of the ratios being different rather than the numerator. In addition, many provided detailed discussions of the relative risk taken by the company in each statutory fund without directly addressing the question from a technical perspective.

Part (b) – 3 Marks

Part b) was very well answered with the vast majority of students showing a good knowledge of target surplus and recognising that the MRC requirement was the regulatory minimum that had to be met.

Part (c) – 8 marks

Part c) was reasonably well answered overall, with most students picking up marks in at least some sections of the question. For section i), all students recognised the positive impact of the

current capital injection but only the better students recognised that it would not solve the underlying problem in the longer term. Instead many spent time discussing return required on capital and marks were not awarded for this.

In section ii) a large number of students stated that the resilience reserve for SF1 may rise after converting from equities to cash which demonstrated a lack of knowledge of capital requirements for risk business. Also, many students stated that converting to cash may jeopardise required returns to shareholders when the important issue for the question was volatility. Better responses to section iii) recognised the delay to any impact of premium rises as well as providing a technically correct discussion of possible flow on consequences. Most students recognised that closing the company to new business would realise a short term improvement to capital position.

Part (d) – 3 marks

Part d) was the most difficult part of the question with few candidates scoring significant marks. A handful of students recognised the need to advise the Board of the relative probability of breaching MRC requirements when running at 85% of target surplus relative to 100% of target surplus. None of these students took the additional step of stating what this probability change meant in practical terms in a form understandable to the Board. Some marks were able to be awarded to candidates who gave a discussion of some of the possible actions available to the Board.

Question 6 (34 marks)

This question covers the case of an insurer issuing immediate annuities which are reinsured for durations beyond 20 years. Candidates are asked to focus on analysis of profit issues as well as the potential to recapture some or all of the business from the reinsurer.

Results

The overall results for this question were as follows:

	Raw Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	18.0	52.9%	2	4.0%
Pass	14.0	41.2%	14	28.0%
Slightly Below Standard	10.0	29.4%	18	36.0%
Weak	4.0	11.8%	16	32.0%
Serious Lack of Knowledge	0.1	0.3%	0	0.0%
Did Not Attempt	0.0	0.0%	0	0.0%
			50	
Maximum Mark	18.0			
Average Mark	11.6			
Standard Deviation	4.5			

Note: the raw marks in this table represent the sum of the marks of the two markers (i.e. under this presentation, the total available marks for this question is 34).

Markers' Comments

Part (a) – 2 Marks.

This question asked about the large investment loss for the lifetime annuity portfolio.

Most candidates were able to identify widening credit spreads and/or defaults on corporate bonds as possible reasons for the loss. However, many were not clear on how precisely this would translate into losses. For widening credit spreads, not many compared the impact on assets to the impact on liabilities (if using risk free rates to value liability, liability does not move but assets decrease => loss). For defaults, many did not highlight that defaults have to be significant (defaults are priced in the yield, it's when they become significant that it causes losses). Only one candidate picked up (tangentially) on the excess assets issue.

Part (b) – 2 marks

This question asked about profits from investment linked option offsetting potential loss recognition for annuities.

Many candidates answered along the lines of, "annuity and IL are different products because of benefit characteristics and payment features, therefore in different RPG, so can't use profits to offset losses.". The model answer includes 1 mark for recognition that annuity and IL are separate products. Many candidates did not address this specifically. 0.5 marks were awarded where this was strongly implied. Some candidates did say the products were in different RPGs but did not say why in which case only 0.5 marks given.

Part (c) – 5 marks

This asked about the impact on analysis of profit and PVFPM if number of annuitants dying less than expected.

Many candidates got some of the points in the model answer i.e. experience loss from higher annuity payments/higher liability at end of period and PVFPM higher if no assumption change/lower if assumption change. No candidates mentioned DAC runoff (perhaps they did not think it was likely that annuities could have DAC), but a number did mention possible expense losses. 0.5 marks were awarded for mentioning expense losses, and an extra 0.5 mark was awarded when the candidate mentioned that the impact would be small.

Part (d) – 8 marks

It could be seen that the weaker candidates gave standard reasons for reinsurance without considering the specifics of the question. For example, a number of candidates mentioned that technical and other support from the reinsurers was an issue to consider (valid, 0.5 marks were awarded for this), but included underwriting as an example of reinsurer support. Annuities are not underwritten!

It was interesting to see the number of candidates who said (in different ways) that it would not be a good idea to cease reinsurance. The question asked for consideration of issues, not recommendations for action. Also, candidates did not balance potential risks with the potential benefits.

A few candidates did identify that rising interest rates would be incorporated in pricing of new annuities. None however identified that rising interest rates would not have an impact on profit given that assets and liabilities were closely matched.

3A Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

60 Candidates enrolled for the Semester 2 2008, 3A General Insurance exam. Of these, 4 did not present at the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 21 Candidates be awarded a pass, which implies a pass rate of 41%. This compares with a pass rate of 52% for the 2008, Semester 1 exam.

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	60
Withdrawn prior to exam	8
Absent from exam	1
Presented at exam	51
Passed	21
Failed	30

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Sydney	41	15	37%
Melbourne	4	2	50%
Singapore	1	0	0%
Brisbane	1	0	0%
Adelaide	1	1	100%
Munich	1	1	100%
Perth	2	2	100%
Other	0	0	0%
Total	**51**	**21**	**41%**

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: David Gifford
Assistant Examiners: Julie Evans and Bruce Harris

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

Question	Units	Knowledge & Understanding	Straight-forward Judgement	Complex Judgement	Total Marks
1 (a)	2		4		4
1 (b)	2		2		2
1 (c)	3			2	2
1 (d)	2			3	3
1 (e)	3	2			2
1 (f)	3	5			5
2 (a)	2		3		3
2 (b)	2		3		3
2 (c)	3			5	5
2 (d)	4	4			4
3 (a)	3		3		3
3 (b)	3		3		3
3 (c)	3		3		3
3 (d)	3			3	3
3 (e)	4	3			3
4 (a)	3	4			4
4 (b)	3			8	8
4 (c)	3			4	4
5 (a)	1	3			3
5 (b)	1	3			3
5 (c)	1		3		3
5 (d)	1		2		2
5 (e)	3			8	8
6 (a)	2		3		3
6 (b)	2			3	3
6 (c)	2		5	4	9
6 (d)	2		2		2
TOTAL		**24**	**36**	**40**	**100**

Table 4 – Course Coverage

Question	Units	Knowledge & Understanding	Straight-Forward Judgement	Complex Judgement	Total Marks
1	2,3	7	6	5	18
2	2,3,4	4	6	5	15
3	3,4	3	9	3	15
4	3	4	0	12	16
5	1,3	6	5	8	19
6	2	0	10	7	17
Total		**24**	**36**	**40**	**100**

Based on the table above, questions 4, 5 and 6 were the more challenging questions, with relatively higher marks relating to complex judgement, and fewer marks relating to

knowledge and understanding. This was reflected in the final pass marks for these questions, particularly for questions 5 and 6, which are discussed further below.

Table 6 – Pass Rates

	Ass 1	Q1	Q2	Q3	Q4	Q5	Q6
Pass	78%	39%	43%	62%	51%	30%	19%
Fail	22%	61%	57%	38%	49%	70%	81%

3.6. Question by Question Analysis

QUESTION 1 (19 MARKS)

Course coverage: Units 2 & 3
Mark allocation: Knowledge and Understanding – 7 marks
                      Straightforward Judgement – 6 marks
                      Complex Judgement – 5 marks

The first part of the question (a through to d) was on the use of PPCF to value Workers' Compensation Common Law data. The second was on the derivation of Risk Margins for a Public Liability portfolio. Overall the quality of candidates was relatively poor. Many had little idea of how to determine GUFs, or where they did made some very basic errors in considering what GUF to apply. Students performed better on the risk margin piece of the question, although not very many students specifically considered the characteristics of the class of business when formulating their answers. Quite a number of students wrote a lot but achieved few if any marks.

Part a) Required candidates to explain with reasons what GUFs should be applied to payments, reported claim numbers, and numbers of finalisations for the 30 June 2008 accident year and earlier accident years, (given 10 months of data). Better answers stated that a starting point for estimating the GUF was a multiple of 12/10 and that the latest accident year would require higher multiples that the earlier years. Some students gave inconsistent answers in regard to claim numbers, finalisations and payments. Average marks were low.

Part b) Required candidates to consider the implications on the valuation assumptions of using grossed up data. A large number of students gave sensible answers around placing less weight on the latest diagonal. A few students made other good suggestions - ie. consider the sensitivity of the result to the latest diagonal, look for large payments that have been grossed up.

Part c) Required candidates to consider the impact of the grossed up data on the Risk Margin. Most students correctly answered that risk margins should increase due to the increased uncertainty. Very few students considered the materiality of the increased uncertainty in the context of the WC portfolio.

Part d) Required candidates to consider what could be possible reasons for experience being 10% higher than expected and how they would respond to that. Most students stated at least one of the two key drivers of higher payments (more finalisations & higher average size). Fewer students stated appropriate responses to the experience. Better students related their answers to the PPCF model being used.

Part e) Required candidates to comment on the appropriateness of using a stochastic chain ladder approach for the risk margin if the underlying model wasn't a chain ladder model. Most students correctly answered that it was appropriate to use a stochastic chain ladder approach. Better answers stated that the stochastic chain ladder reflects variability present in the underlying data and discussed other strengths, weakness and limitations of this approach.

Part f) Required candidates to describe the process for determining an appropriate Risk Margin. Average marks were higher than in earlier sections. However consideration of risks not captured by the statistical models (systemic risk) was missed by a large number of students.

Final grades were distributed as follows:

  i.   Strong Pass (A) – 5 candidates
  ii.   Pass (B) – 15 candidates
  iii. Slightly Below Standard (C) – 20 candidates
  iv.   Weak (D) – 10 candidates
  v.   Showed Little Knowledge (E) – 1 candidates
  vi.   Did Not Attempt (X) – 2 candidates

QUESTION 2 (17 MARKS)

Course coverage: Units 2, 3 and 4
Mark allocation: Knowledge and Understanding – 4 marks
                      Straightforward Judgement – 6 marks
                      Complex Judgement – 5 marks

This question covered a range of relatively straightforward valuation topics. It was not particularly well answered.

Part a) (3 marks) Required candidates to outline how a loss ratio would be selected for a BF valuation for a domestic motor book. This was moderately well answered, although relatively few candidates mentioned the need to consider catastrophe potential.

Part b) (3 marks) Required candidates to select a loss ratio and estimate the outstanding claims liability for the most recent accident year, using the BF method. Summary loss ratio and payment history was provided. Most candidates made a reasonable assumption for the loss ratio. The BF method may not be well understood – at least in its "paid" form – as few candidates adjusted for an assumed payment pattern, but simply deducted the paid to date from the ultimate incurred estimate.

Part c) (5 marks) Required candidates to roll-forward a valuation 12 months, for a portfolio going into run-off. Both outstanding claims (OSC) and premium liability (PL) estimates were required. Performance was mixed. Whilst most recognised that the PL would be zero, not all combined the opening values of the OSC and PL in the roll-forward calculation. The unwinding of the discount was relatively well handled, but a surprising number of candidates attempted some form of inflation-adjustment. The question also asked that assumptions should be stated; few mentioned that the assumption that the valuation basis remained unchanged.

Part d) (4 marks) Required candidates to list items (in addition to the OSC and PL) required in order to calculate the profit for the year. The responses were poor given it was a straightforward question. Most candidates listed only three or four items.

Final grades were distributed as follows:

  vii.   Strong Pass (A) – 2 candidates
  viii. Pass (B) – 20 candidates
  ix.   Slightly Below Standard (C) – 21 candidates
  x.   Weak (D) – 8 candidates
  xi.   Showed Little Knowledge (E) – 0 candidates
  xii.   Did Not Attempt (X) – 2 candidates

QUESTION 3 (13 MARKS)

Course coverage: 3 and 4
Mark allocation: Knowledge and Understanding – 3 marks

Straightforward Judgement – 9 marks
Complex Judgement – 3 marks

This question focussed on premium earning and liability questions for multi-year policies (a combination of 2 yr, 3 yr and 4 yr). In the main it was well answered.

Part a) (3 marks) Required candidates to set out, and calculate, the earned premium for the latest year. This was well answered. The numerical answer was provided in the table of information with the question, so it was disappointing that some of those who got the answer wrong did not realise and comment on this.

Part b) (3 marks) Required candidates to set out, and calculate, the unearned premium. This was similar to part a) and was also well answered.

Part c) (3 marks) Required candidates to recommend a loss ratio for a premium liability calculation. The data provided included one year with a very high loss ratio, and most candidates commented appropriately on this. The information provided with the question included a table of average premiums; few candidates mentioned this in discussing the loss ratio selections.

Part d) (3 marks) Required candidates to calculate an appropriate premium liability central estimate, stating all assumptions made. Expense assumptions were provided in the question. This was well answered, although some students did not realise that the base for claims handling expenses, and policy administration expenses should be different. Most recognised that inflation and discounting may be required, however very few mentioned the need to consider cancellations.

Part e) (3 marks) Required candidates to calculate the appropriate premium figures for the accounts. Most recognised that this required a LAT and used the right inputs - premium liability with risk margin, DAC (given) and unearned premium. Most also recognised that the DAC was required to be written down to zero. In estimating the unexpired risk reserve, however, many included the DAC in the final calculation.

Final grades were distributed as follows:

   i.   Strong Pass (A) – 6 candidates
   ii. Pass (B) – 25 candidates
   iii. Slightly Below Standard (C) – 13 candidates
   iv. Weak (D) – 5 candidates
   v.   Showed Little Knowledge (E) – 1 candidates
   vi. Did Not Attempt (X) – 3 candidates

QUESTION 4 (17 MARKS)
Course coverage: Unit 3
Mark allocation: Knowledge and Understanding – 4 marks
                     Straightforward Judgement – 0 marks
                     Complex Judgement – 12 marks

The question asked candidates to calculate a claims handling allowance. Overall the quality of responses was good with nearly all receiving a strong pass, pass or slightly below standard result.

Part a) Required candidates to consider how various expenses should be allocated. The second part of the question asked candidates to describe how to apportion each partially allocated expense item. A number of candidates failed to appropriately consider the allocation of management expenses, Audit and APRA costs. Many also failed to adequately consider how to apportion Rent and IT costs appropriately.

Part b) Required candidates to calculate claims handling expenses as a proportion of claim payments over three years. As such the failings of part a) were carried through

to part b). Most candidates calculated a reducing trend but many failed to make direct mention of it.

Part c) Required candidates to calculate an inflated and discounted central claims handling expense estimate. Few candidates recognized that there was superimposed inflation in claim payments but not in claims handling expenses. Despite that many noted the falling trend and adopted a rate close to 11.5%.

Final grades were distributed as follows:

i. Strong Pass (A) – 2 candidates
ii. Pass (B) – 22 candidates
iii. Slightly Below Standard (C) – 19 candidates
iv. Weak (D) – 4 candidates
v. Showed Little Knowledge (E) – 0 candidates
vi. Did Not Attempt (X) – 4 candidates

QUESTION 5 (18 MARKS)

Course coverage: Units 1 and 3
Mark allocation: Knowledge and Understanding – 6 marks
Straightforward Judgement – 5 marks
Complex Judgement – 8 marks

The first two parts of the question tested candidates' knowledge of insurance products and insurability. The last three parts related to claims made and claims incurred policies. Overall the quality of responses was poor, with very few candidates making any substantial progress in part e). A number appeared to run out of time.

Part a) Required candidates to consider what insurance products would be appropriate in two specified circumstances. This part was straightforward and was answered well although a number of candidates did not identify landlords insurance.

Part b) Required candidates to consider whether insurers should provide cover for flood events. The question was answered reasonably. The wording misled a few candidates with some giving a lot of detail about different types of flood event and relatively little in relation to the insurability criteria.

Parts c)-e) concerned a company switching from a claims incurred policy definition to claims made. Part c) Required candidates to consider when there would be overlaps in coverage. This part was answered reasonably with a number of candidates demonstrating a reasonable understanding of these types of policy.

Part d) required candidates to consider whether there would be any gaps in coverage. Again this was answered reasonably – a number correctly identified that there would be no gaps.

Part e) required candidates to estimate liabilities in relation to the run-off claims made business, and then in relation to the "cross-over" period, where both claims incurred and claims made policies were in force. This part was answered very poorly, with less than a quarter of candidates making any substantial progress.

Given the relative difficulty of part e) the pass mark was set such that if candidates performed reasonably on the other four parts it was possible to pass even if no attempt was made in part e). Nonetheless overall performance was poor with only fifteen candidates being deemed worthy of passing out of 51 attempts.

Final grades were distributed as follows:

i. Strong Pass (A) – 4 candidates
ii. Pass (B) – 11 candidates
iii. Slightly Below Standard (C) – 16 candidates

iv.   Weak (D) – 14 candidates
v.   Showed Little Knowledge (E) – 5 candidates
vi.   Did Not Attempt (X) – 3 candidates

QUESTION 6 (16 MARKS)

Course coverage: Unit 2
Mark allocation: Knowledge and Understanding – 0 marks
                           Straightforward Judgement – 10 marks
                           Complex Judgement – 7 marks

This question asked candidates to consider a PPCI valuation performed by an actuarial student in relation to a portfolio with a "twist" (a large number of one-off, small claims) and then to make appropriate adjustments to the valuation. Overall it was answered very poorly, with many candidates failing to identify the major issues in the original valuation, or failing to adjust appropriately for them.

Part a) Required candidates to consider whether the actuarial student had made appropriate judgements in relation to several key aspects of the original valuation. This part was answered reasonably although many candidates felt that the student's PPCI selections were appropriate, despite their being heavily influenced by a one-off event.

Part b) Required candidates to estimate the superimposed inflation present in the portfolio. Many made reasonable calculations although a number did not closely read the information provided in the question, misinterpreting one particular table which showed observed superimposed inflation.

Parts c) required candidates to recalculate the liability for outstanding claims making adjustments based on their response to part a). This part was answered poorly, with most candidates only adjusting for superimposed inflation. There were even a number of candidates who identified issues with the original valuation in part a), but did not make any adjustments in response to these in part c).

Part d) required candidates to consider possible approaches to better dealing with the unusual one-off claims. Most candidates identified that they could be excluded, but very few made any other sensible suggestion.

Final grades were distributed as follows:

    i.   Strong Pass (A) – 4 candidates
    ii.   Pass (B) – 5 candidates
    iii.   Slightly Below Standard (C) – 23 candidates
    iv.   Weak (D) – 9 candidates
    v.   Showed Little Knowledge (E) – 7 candidates
    vi.   Did Not Attempt (X) – 5 candidates

3B Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

62 candidates enrolled for the Semester Two 2008, Course 3B: General Insurance exam. All candidates that enrolled sat the final exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 23 candidates be awarded a pass, which implies a pass rate of 37% for candidates sitting the exam. This compares with the following pass rates for this subject for recent semesters:

Table 1 – Pass Rates

Year	Semester One	Semester Two
2008	40%	37%
2007	48%	48%
2006	50%	39%
2005	50%	32%

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 2 – Candidate Numbers

	Number of candidates
Originally enrolled	66
Withdrawn prior to exam	4
Absent from exam	0
Presented at exam	62
Passed	23
Failed	39

The analysis by examination centre is as follows:

Table 3 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Adelaide	1	0	0%
Brisbane	1	1	100%
Melbourne	6	3	50%
Perth	1	0	0%
Sydney	48	18	38%
Subtotal: Australia	57	22	30%
Auckland	1	0	0%
Wellington	1	0	0%
London	2	1	50%
Singapore	1	0	0%
Subtotal: International	5	0	0%
Total	**62**	**23**	**37%**

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: Adam Payne
Assistant Examiner: Paul Goswamy
Assistant Examiner: Kitty Ho

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 5 – Summary of Syllabus

Aim	Summary Description
1	Understand the components of a premium
2	Explain the core philosophy underpinning rating and pricing
3	Recognise and select between approaches in classifying risk for premium rating purposes
4	Obtain base premium rates for future business and project premium amounts for budgeting and planning purposes
5	Describe the concept of "Sound Rating"
6	Adjust for other influences on premium rating
7	Recognise the concepts of 'short tail" and "long tail" business and the differences in approach for pricing purposes
8	Collect and be able to apply tools required for the pricing of "short tailed" business
9	Collect and be able to apply the tools required for the pricing of "long tailed" business

10	Describe the techniques used by reinsurers to price and rate the various reinsurance risks and to recognise the various types of reinsurance contracts and their applications
11	Establish the linkage between capital and risk
12	Explain and apply the means of accounting for risk
13	Explain and apply strategies for efficient use of capital
14	Define the requirements of a statutory Financial Condition report and how this fits into a broader financial condition reporting framework
15	Identify the various sources of risk to a general insurer (including operational risk) and to account for them
16	Calculate an actuarial value for the business
Unit	
1	Pricing Principles
2	Detailed Pricing Considerations
3	Capital Management Principles
4	Financial Condition Reporting

The following tables show the distribution of questions and marks by level of difficulty and course coverage.

Table 6 – Degree of Difficulty of Exam

Question	Syllabus Aims	Units	K&U	SJ	CJ	Total Marks
1 (a)	13	3		5		5
1 (c)	15	4		5		5
1 (d)	12	3			5	5
2 (a)	6	1		3		3
2 (b)	1	1		2		2
2 (c)	1	1			3	3
2 (d)	1,4,8	1,2			5	5
2(e)	8	2		2		2
3 (a)	5	1	2			2
3 (b)	6	1		1		1
3 (c)	6	1			3	3
3 (d)	8	2		3		3
3(e)	2	1	2			2
3(f)	10	2	4			4
3(g)	15	4		5		5
4 (a)	8	2		3		3
4 (b)	8	2			3	3
4 (c)	8	2			3	3
4 (d)	15	4	6			6
4 (e)	15	4	2			2

5 (a)	10	2	2			2
5 (b)	11	3		2		2
5 (c)	10,11	2,3		2		2
5 (d)	10,11	2,3			6	6
5 (e)	11	3			4	4
6 (a)	9	2	4			4
6 (b)	9	2		4		4
6 (c)	9,12	2,3			5	5
6 (d)	16	4			4	4
TOTAL			22	37	41	100

Table 7 – Course Coverage

Question	Units	Syllabus Aims	Knowledge & Understanding	Straight-Forward Judgement	Complex Judgement	Total Marks
1	3,4	12, 13, 15	0	10	5	15
2	1,2	1, 6	0	7	8	15
3	1,2,4	2, 5, 6, 8, 10, 15	8	9	3	20
4	2,4	2, 4	8	3	6	17
5	2,3	10, 11	2	4	10	16
6	2,3,4	9, 12, 16	4	4	9	17
Total			22	37	41	100

Based on Table 7, questions 2, 5 and 6 have relatively more weight to Complex Judgement so might have a higher degree of difficulty. By way of contrast, questions 3 and 4 have relatively more marks allocated to Knowledge and Understanding so might be considered to have a lower degree of difficulty. In Table 9 this is reflected in each question's pass rate.

Table 9 – Pass Rates

	Ass 1	Q1	Q2	Q3	Q4	Q5	Q6
Pass	92%	34%	44%	76%	42%	15%	29%
Fail	8%	66%	54%	24%	58%	85%	71%

3.5. Overall Performance

Overall, the exam paper and assignment (combined) acted as a reasonable discriminator, with raw marks ranging from 70 to 132 out of 200. This range was narrower than the range for last semester (66 to 137 out of 200). The higher average raw marks compared to last semester (108 compared to 106 for last semester) were partly due to the exam and partly due to the assignment. Overall candidate performance was similar to that in prior semesters.

The impression that the examiners had after setting the paper was that it was not a particularly difficult paper, in the sense that it did not contain one or more questions that required candidates to apply core concepts in extraordinary new areas. However, we felt that on balance it was a reasonable paper that would provide a good broad test of

candidates' knowledge and understanding and ability to apply this, and their judgement, to some practical situations.

Question 5 was poorly attempted. Few candidates answered this in the manner expected by the examiners. We think this was largely due to some aspects of the question's wording and the lay out of some of the numbers in the question. However, the question had been significantly simplified through the exam scrutineer process. Whilst some of the calculations may have been testing under exam conditions, there were some relatively easy marks available if the candidates approached the question in a clear and structured manner. This suggested poor exam technique also played a role in the overall low scores. We concluded that this question was marked fairly and did not distort the overall assessment process.

Generally the scores assigned by the markers were consistent with what might normally be expected based on the marking guide. Marker pairs had generally reconciled any differences in their marks and the extent of remarking was fairly limited. Markers adjusted the grade cut-offs according to the perceived difficulty of the question. The examiners reviewed these scales where necessary and were satisfied with the thresholds assigned and the spread of marks.

There were few candidates meeting 3 or 4 of the pass criteria (only 7). Most candidates either did well overall (26 candidates satisfied 5 or more of the criteria) or did poorly overall (29 candidates satisfied 2 or fewer of the criteria). This is consistent with last semester. The examiners reviewed the marking thoroughly to ensure this was not the result of some anomaly in the marking process.

The overall pass rate is broadly comparable to recent semesters for this course.

Candidates found question 3 the easiest of the exam questions (76% pass rate) and question 5 the most difficult (15% pass rate).

There is more detail in the question by question analysis below. Nonetheless, some consistent messages from the markers were as follows:

- Candidates are not going beyond "stock" answers. They often ignore information given in the question in favour of "lists" of responses and standard approaches, without adapting these for the situation or considering the appropriateness in the circumstances. It is sometimes difficult to conclude whether the candidates have the requisite skills to apply their knowledge, or if this is exam technique issue. We identified this comment in the corresponding Chief Examiner's report for Course 3B: General Insurance last semester.
- Candidates do not necessarily respond to all points raised in a question, even where the question specifically asks them to consider these.

Specific common mistakes and weaknesses are discussed further in the question by question analysis below.

3.6. Question by Question Analysis

QUESTION 1 (15 MARKS)

Course coverage: Unit 3 & 4, Syllabus Learning Objectives 12, 13 & 15
Mark allocation: Knowledge and Understanding – 0 marks
                     Straightforward Judgement – 10 marks
                     Complex Judgement – 5 marks

This question required candidates to assess the suitability of an investment proposal for a long

tail and short tail product for a hypothetical insurer. Candidates were also required to provide a summary of how this change would be reflected in an FCR as well as describing the Concentration Risk that the company is exposed to. This seemed a relatively straightforward question and most candidates scored reasonable marks for this question. Of those candidates that sat the exam 34% passed the question.

Part a) asked candidates to assess the suitability of two investment proposals, namely investing in wheat futures for crop insurance and investing in the shares of clients' competitors for pharmaceutical products liability. Most candidates are aware that the two investment strategies were not ideal but did not articulate the reasons well. The markers found that candidates tended not to give enough points which led to low marks. Most candidates commented on the liquidity issue with both investment strategies. Only some candidates commented on the mismatch due to the short tail nature of crop business and long tail nature of products liability.

Regarding investment in wheat futures, the markers noted there seemed to be an inadequate understanding about how the futures market operates. Only a few candidates identified the key issues relating to the nature of wheat futures – they may not be tied to the domestic price of wheat, crop insurance is exposed to other types of crops, change in wheat prices may not match the size of insurance loss, etc.

Regarding investment in clients' competitors' shares, most candidates identified that the share price will be volatile and is not impacted by their clients' performance alone. Not many candidates discussed that there may be many competitors and the strategy will require systems and controls to allow continual monitoring on these shares.

The markers noted a significant proportion of papers commented that the General Insurer should focus on insurance as it was their core business. However, they felt this was uncommercial for a medium size insurance company, which would generally have an investment team.

The average mark was 1.7 out of 5.

Part b) asked candidates to provide a summary of how the change in investment strategy would be reflected in the next FCR. Again, most candidates did not give enough points to get the marks. The description on the capital management of FCR was generally well answered as most candidates mentioned the need to describe the strategy's impact on the MCR. However, the description on investment and risk management sections of the FCR was poorly answered. Some candidates repeated their descriptions of the risks from part a) in this part. It seems that some candidates are not familiar with the general framework of a FCR. The average mark was 2.6 out of 5.

Part c) required candidates to define and explain how Concentration Risk may arise under several products. Most candidates missed giving a definition, which was an easy mark to get. Most candidates scored full marks for the sources of concentration risk, as this was relatively straight forward. However, there seemed to be a shallow understanding of GPS 116. Overall, the candidates did not provide a detailed enough explanation of calculating MER. The candidates failed to note that it is the maximum event, not just any event. Many candidates missed discussions on reinsurance and reinsurance reinstatements. The average mark was 2.4 out of 5.

Final grades were distributed as follows:

Strong Pass (A) – 6 candidates

Pass (B) – 15 candidates

Slightly Below Standard (C) – 26 candidates

Weak (D) – 9 candidates

Showed Little Knowledge (E) – 6 candidates

Not Attempted (X) – none.

QUESTION 2 (15 MARKS)

Course coverage: Unit 1, Syllabus Learning Objectives 1, 4, 6 & 8

Mark allocation: Knowledge and Understanding – 0 marks

                    Straightforward Judgement – 8 marks

                    Complex Judgement – 7 marks

This question required candidates to have an understanding of the differing price elasticity, expense ratios and capital charges of travel insurance products sold through different distribution channels. The question also required the candidates to perform a premium calculation. This seemed a relatively straightforward question and most candidates scored reasonable marks for this question. Of those candidates that sat the exam 44% passed the question.

Part a) asked candidates to give reasons for differing price elasticity for the different travel insurance distribution channels. Almost all candidates were able to identified websites and telephone shoppers are more likely to shop around and therefore are most price sensitive. Most candidates also identify that for travel agents, insurance may be sold as part of a travel package and therefore are less price sensitive. This question was generally well answered. The average mark was 1.9 out of 3.

Part b) asked candidates to give reasons for differences in expense ratios. Most candidates identify brokers' commissions will increase expenses. Also, most identify lower cost base for internet and telephone sales. Overall, the question was well answered. The average mark was 1.1 out of 2.

Part c) required candidates to explain why the capital charge would be different for business sold though different channels. Most candidates commented that the greater the risk of the underlying business, the higher the capital charge. Also most candidates identified the key point of different risk profiles in broker business (corporate) and internet sales (general public). Some commented on the quality of underwriting by brokers compared to internet sales. However, only a few candidates commented on the less variability in broker business and volume of business for brokers reduces non-systemic risk. The average mark was 1.0 out of 3.

Part d) asked the candidates to calculate a premium quotation for a large travel agency purchasing insurance from insurer. Most candidates were able to state the claims cost, commission, expenses and capital charge assumptions. Some stated these as loss ratio and the respective ratios. Most candidates missed profit loading. Only some candidates got the correct set up of the premium calculation formula. Most candidates did not give a clear recommendation. It was disappointing to see some candidates did not attempt this calculation question. The average mark was 2.4 out of 5.

Part e) was a bookwork question asking candidates to suggest exclusions on the travel insurance product. Most candidates scored well for this part. The average mark was 1.2 out of 2.

Final grades were distributed as follows:

Strong Pass (A) – 5 candidates

Pass (B) – 22 candidates

Slightly Below Standard (C) – 26 candidates

Weak (D) – 8 candidates

Showed Little Knowledge (E) – 1 candidate

Not Attempted (X) – none.

QUESTION 3 (20 MARKS)

Course coverage: Unit 1,2 & 4, Learning Objectives 2,5,6,8,10 & 15

Mark allocation: Knowledge and Understanding – 8 marks

                    Straightforward Judgement – 9 marks

                    Complex Judgement – 3 marks

This question required candidates to calculate sound premium rates for a given block of business and to identify reasons for differences in premium rates for a given volume of business. Candidates were also asked to suggest possible reinsurance arrangements for a new product and how a new product might be reported in the FCR. This seemed a relatively straightforward question and most candidates scored reasonable marks for this question. 76% of candidates passed the question.

Part a) asked candidates to calculate the sound premium rate given the analysis performed by the research department for two different volumes of business. Most candidates calculated the sound premium rate correctly. A number of candidates applied the assumed profit margin to the claims cost rather than grossing the claims cost up by the profit margin. The average mark was 1.7 out of 2.

Part b) required candidates to suggest why the sound premium rates differ for different blocks of business. Generally this part of the question was well answered, with most candidates identifying economies of scale and lower systemic risk for large premium volumes. The average mark was 0.9 out of 1.

Part c) asked candidates to identify other issues they would consider before suggesting a final premium rate. The calculated premium rates were significantly lower than competitor's rates. Most candidates suggested further investigation of the appropriateness of the research department's assumptions. Better candidates suggested an element of sensitivity testing to quantify the impact of variations in the assumptions on sales volumes and profitability. The average mark was 1.9 out of 3.

Part d) required candidates to suggest possible exclusions for an Accident & Sickness policy. Most candidates were able to suggest three exclusions. The average mark here was 1.7 out of 3.

Part e) required candidates to suggest possible sources of risk rating data for a new product. Most candidates were able to identify a number of sources of data. The average mark here was 1.3 out of 2.

Part f) required candidates to identify different reinsurance arrangements suitable for a new product including the risk they are designed to protect and the impact of the reinsurance on the profit/risk margins required by the insurer. Most candidates were able to identify a number of reinsurance options and the risk they are designed to protect, but few candidate provided a suitable discussion of the impact of reinsurance on an insurer's profit and risk margins. The average mark here was 2.0 out of 4.

Part g) required candidates to discuss how the decision to introduce a new product should be reflected in an insurer's FCR. Most candidates discussed each section of an FCR providing a general discussion of the issues to be reviewed. Few candidates related the sections of the FCR back to the specifics of the question and the specific issues with writing a new line of business. The average mark here was 3.6 out of 5.

Final grades were distributed as follows:

Strong Pass (A) – 6 candidates

Pass (B) – 41 candidates

Slightly Below Standard (C) – 14 candidates

Weak (D) – 1 candidate

Showed Little Knowledge (E) – none.

QUESTION 4 (17 MARKS)

Course coverage: Units 2 & 4, Learning Objectives 8 & 15

Mark allocation: Knowledge and Understanding – 8 marks

                      Straightforward Judgement – 3 marks

                      Complex Judgement – 6 marks

This question examined candidates' understanding of pricing structures and premium relativities between classes of motor insurance. Candidates were also asked to discuss the issues of cross subsidies and how a change in the market could impact relative cross-subsidies and impact on the prices and insurer can charge. This also seemed a reasonably straightforward question, and candidates generally answered this question well. 42% of candidates passed this question.

Part a) asked candidates to calculate new premium relativities for a number of motor classes. Candidates were then asked to suggest changes to the relativities given. Most candidates were able to calculate the new relativities, but the responses to the suggested changes were mixed. Generally only minor changes to the relativities were warranted given only one year of experience but the response varied from no changes to fully reflecting the calculated relativities in the new pricing structure. The average mark was 1.3 out of 3.

Part b) required candidates to discuss the impact of cross-subsidies for one or more segments on the prices charged to other segments. This part of the question was generally well done. The average mark was also 1.3 out of 3.

Part c) asked candidates to consider the impact of adding competition into the market on existing cross-subsidies on both the existing insurer and the new insurer. Most candidates identified the key concepts, although detailed discussion was lacking in some responses. The average mark was 1.3 out of 3.

Part d) asked candidates to suggest a new prudential regime that protects consumers and takes into account an insurer's risks. Many simply listed the various sections of the APRA prudential framework without relating them to the specifics of the question. This approach was still sufficient for a candidate to achieve a pass grade and, therefore, most candidate scored well on this part. The average mark was 3.6 out of 6.

Part e) asked candidates to list the advantages and disadvantages of internal models. The average mark was 1.5 out of 2.

Final grades were distributed as follows:

Strong Pass (A) – 3 candidates

Pass (B) – 23 candidates

Slightly Below Standard (C) – 31 candidates

Weak (D) – 4 candidates

Showed Little Knowledge (E) – 1 candidate.

QUESTION 5 (16 MARKS)

Course coverage: Units 2 & 3, Syllabus Learning Objectives 10 & 11
Mark allocation: Knowledge and Understanding – 2 marks
                      Straightforward Judgement – 4 marks
                      Complex Judgement – 10 marks

Question 5 focused on reinsurance. Data relating to aggregate claims and claim number was presented. The question was poorly answered. On reflection some of the later sections could have been presented more clearly. However this did not explain the low level of knowledge associated with parts (a),(b) and (c) which were not considered complex judgement. Only 15% of candidates passed the question.

Part (a) asked for candidates to comment on the benefits of quota share reinsurance. This was considered simple bookwork. In the main this was answered reasonably well. Average mark of 1.5 of 2.

Part (b) asked to candidates to define probability of default in the context of the insurer with a given level of capital. Given the bookwork nature of this question it was surprising how many candidates failed to score any marks for this section. Average mark of 0.7 of 2.

Part (c) asked candidates to carry out a simple calculation of the probability of default assuming no reinsurance based on the existing capital of the insurer, a given level of premium and a gross claim cost probability distribution. Average mark of 1.2 out of 2.

Part (d) was looking for candidates to work with the claim count distribution and the logic of how many claims would be required to give rise to default. The wording of the question provided direction on this. Few candidates managed to use the data available and calculate the probability of default. Average mark of 1.1 out of 6

Part (e) in part required some insight into the answer of part (d) to deliver a full answer. However, even with the calculated answer to part (c) candidates could have made comments on the probability of default relative to the risk appetite. Many candidates failed to score well. Average mark 0.9 out of 4.

Final grades were distributed as follows:

Strong Pass (A) – 2 candidates

Pass (B) – 7 candidates

Slightly Below Standard (C) – 23 candidates

Weak (D) – 15 candidates

Showed Little Knowledge (E) – 15 candidates

QUESTION 6 (15 MARKS)

Course coverage: Units 9, 12 & 16, Syllabus Learning Objectives 9,12 & 16

Mark allocation: Knowledge and Understanding – 4 mark

                      Straightforward Judgement – 4 marks

                      Complex Judgement – 9 marks

Question 6 tested candidate's knowledge on policy form, pricing and capital considerations relating to the Medical Indemnity market. The question was based on actual experience and issues that gripped the MDO market in the early 2000's. There were few candidates who scored highly but many accumulated the marks required to pass this question. 29% of candidates passed the question.

Part (a) was looking for candidates to explain the need for cross subsidies and how they could support lower premiums than technically justified for doctors specialising in Obstetrics. Given the marks available candidates were expected to expand on the conditions required for cross subsidies to work for a portfolio and comment on some of the advantages and drawbacks of such a strategy. Nearly all candidates recognised the use of cross subsidies but many failed to go into sufficient detail on potential impacts of changes in mix of business. Average mark 1.8 out of 4.

Part (b) was an extension of the cross subsidy theme with the expectation that younger doctors may subsidise older doctors. Simple marks were awarded for candidates recognising that there were many possibilities in response to the board members question. The few candidates who identified the main issues associated with claim made exposures, i.e., the need to deal with tail coverage on ceasing practice and new doctors having less exposure until their experience is considered mature, scored well. Average mark 1.5 out of 4.

Part (c) tested how government legislation, in the form of government part funding large claims, impacted premium and capital. Logical thought was required on how reduced claims would feed into reduced overall claims costs and prescribed capital requirements. Extra marks were awarded for candidates who considered why the government would consider taking such action. This section was generally well answered. Average mark 2.7 out of 5.

Part (d) asked for candidates to respond to the information and advice needed in considering mergers or acquisitions. While candidates needed to consider the medical indemnity market to score highly, marks were available for commenting generally with respect to appraisal values. The balance of marks required candidates to consider the context of the question and think laterally to the information presented in the question. Given the ability to score reasonable marks on standard responses to appraisal value, the marks scored, were disappointing. Average mark 0.9 out of 4.

Final grades were distributed as follows:

Strong Pass (A) – none

Pass (B) – 18 candidates

Slightly Below Standard (C) – 13 candidates

Weak (D) – 25 candidates

Showed Little Knowledge (E) – 6 candidates.

5B Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

38 Candidates enrolled for the Semester 2 2008, 5B Investment Management and Finance exam. Of these, 3 did not present at the exam, each of them having withdrawn prior to the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 11 Candidates be awarded a pass, which implies a pass rate of 31% for those sitting the exam. This compares with the following pass rates for this subject in recent semesters:

Overall Pass Rates

Year	Semester Two
2008	31%
2007	34%
2006	27%

The pass rate was the same for candidates who were attempting the subject for the first time and for those who were repeating the subject.

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	38
Withdrawn prior to exam	3
Absent from exam	0
Presented at exam	35
Passed	11
Failed	24

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Sydney	21	9	43%
Melbourne	3	1	33%
Canberra	2	1	50%
Subtotal: Australia	**26**	**11**	**42%**
Malaysia	1	0	0%
Hong Kong	3	0	0%
Singapore	3	0	0%
Netherlands	1	0	0%
London	1	0	0%
Subtotal: International	**9**	**0**	**0%**
Total	**35**	**11**	**31%**

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: David Pitt
Assistant Examiner: Tzer-Han Lim

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following table shows the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

Question	Units	Knowledge & Understanding	Straight-forward judgement	Complex judgement	Total Marks
1 (a)	4		3		3
1 (b)	4		3		3
1 (c)	4		3		3
1 (d)	3	1			1
2 (a) (i)	4		2		2
2 (a) (ii)	3			8	8
2 (b) (i)	2			4	4
2 (b) (ii)	2, 3			6	6
3 (a) (i)	4	3			3
3 (a) (ii)			4		4
3 (a) (iii)			3		3
3 (b)	6			4	4

3 (c)	4, 6			3	3
3 (d)	3		3		3
4 (a) (i)	6	1			1
4 (a) (ii)	6	1			1
4 (a) (iii)	6	2			2
4 (b) (i)	6	1			1
4 (b) (ii)	6	2			2
4 (c) (i)	6		1		1
4 (c) (ii)	6		1		1
4 (c) (iii)	1		1		1
4 (c) (iv)	6		2		2
4 (c) (v)	6	2			2
4 (c) (vi)	6	1			1
5 (a) (i)	5	2			2
5 (a) (ii)	5		3		3
5 (a) (iii)	5		4		4
5 (b) (i)	5	1			1
5 (b) (ii)	5	1			1
5 (b) (iii)	5	2			2
5 (c)	6, 7			7	7
6 (a)	3	2			2
6 (b)	2,3	2			2
6 (c) (i)	2, 3			3	3
6 (c) (ii)	2, 3		3		3
6 (d) (i)	3		4		4
6 (d) (ii)	3		1		1
TOTAL		24	41	35	100

3.5. Overall Performance

The exam paper proved to be a very good discriminator of student understanding and ability to apply judgement with raw marks (on the exam component only) ranging from 51 to 145 out of 200. This was similar to semester 2 2007 where raw exam marks ranged from 38 to 125 out of 200. The average raw exam score this year was 92 out of 200. This reflects the adequate challenge provided by the exam.

The examiners felt that this year's exam would provide a suitable level of challenge to the candidates. A very detailed marking guide was prepared for the markers which meant that some candidates showed understanding but did not pick up as many marks as they may have thought they would. This fact was taken into account by both the markers and examiners in determining the cut-off points for the letter grades awarded to each question.

Candidates found that Q6 was the easiest. While this question did require some judgement, specifically the ability to reverse engineer the payoff from a complicated financial product, candidates had seen similar style questions, although with a different financial product, on previous exam papers. It was pleasing that candidates are using the past examination material that is available to them as part of their preparation. The remaining questions all had broadly similar pass rates.

3.6. Question by Question Analysis

Question 1 (10 marks)

This question tested candidates' ability to apply put-call parity to determining the optimal early exercise strategies for a variety of Bermudan options. The question proved to be a good discriminator with candidates generally either performing well on all parts of the question or struggling with all or most parts of the question.

Many candidates demonstrated a good understanding of the issues being tested by the question. Some of these candidates, however, did not provide sufficient detail to be awarded all the marks available for the question. In determining the final cut-off grades for the question, marks earned by candidates that demonstrated understanding of the basics were considered carefully.

Final grades were distributed as follows:

Strong Pass (A) – 0 candidates

Pass (B) – 10 candidates

Slightly Below Standard (C) – 9 candidates

Weak (D) – 8 candidates

Showed Little Knowledge (E) – 6 candidates

Not Attempted (X) – 2 candidates.

Question 2 (20 marks)

This question covered valuation methodology for exotic options. The mathematical level required by this question was the highest of all questions on the paper. Candidates also needed a clear understanding of martingale pricing in order to succeed on this question.

Part (a) of the question involved a "one touch option" and required students to understand numerical approaches to valuation of a complex derivative product. The answers provided by many candidates showed a basic understanding of simulation but failed to give adequate detail to prove to the examiners that they were confident of all the steps required in order to value the product. Most candidates were unable to identify the boundary condition asked for in part (i) of this part of the question.

Part (b) of the question was mathematical in nature and tested some of the key concepts of the Black-Scholes partial differential equation. While the first part of the question was reasonably well handled, (although there were some very rusty algebraic and basic calculus skills on display!), the second part of the question, which related to martingales, was not well handled. The examiners suspect that a move to increased teaching in this subject should help candidates to develop a better understanding of this part of the subject.

Final grades were distributed as follows:

Strong Pass (A) – 6 candidates

Pass (B) – 6 candidates

Slightly Below Standard (C) – 11 candidates

Weak (D) – 10 candidates

Showed Little Knowledge (E) – 1 candidate

Not Attempted (X) – 1 candidate.

Question 3 (20 marks)

Part (a) of this question covered European exchange options and the practicalities associated with estimating the parameters required for a Black-Scholes valuation of this derivative. This part was quite well answered with many candidates showing a good appreciation of the difficulties associated with estimating volatility and correlations required for the Black-Scholes exchange option valuation formula.

Parts (b) and (c) of this question covered delta hedging and required candidates to demonstrate how to hedge the exposure under an exchange option using either futures or the underlying commodity. Many candidates could correctly identify an outline of the procedure required to determine the hedge however most became lost in the details of the calculations required.

Part (d) of the question required candidates to find the partial derivative of an exchange option valuation formula with respect to the correlation between the returns on the underlyings and to interpret the sign of this derivative. This proved difficult for most candidates. This should have been a reasonably straight-forward part for candidates that were well prepared.

Final grades were distributed as follows:

Strong Pass (A) – 5 candidates

Pass (B) – 9 candidates

Slightly Below Standard (C) – 10 candidates

Weak (D) – 11 candidates

Showed Little Knowledge (E) – 0 candidates

Not Attempted (X) – 0 candidates.

Question 4 (15 marks)

This question was a mix of knowledge and understanding and straight-forward judgement components. The markers commented that this question was relatively poorly answered. Overall, they commented that exam technique was poor, with many candidates missing easy marks through not answering the questions directly and by giving poor explanations of basic concepts.

In part (a), the main weakness was an inability to identify risks associated with mark to market accounting. Candidates often instead wrote about perceived disadvantages of the method rather than inherent risks.

Parts (b) and (c) were reasonably answered. The main issue identified by the markers was that some students gave general answers, such as general advantages and disadvantages

of VAR, rather than the more specific factors relating to the use of a scaling factor to determining VAR for market risk purposes.

Final grades were distributed as follows:
Strong Pass (A) – 1 candidate

Pass (B) – 11 candidates

Slightly Below Standard (C) – 15 candidates

Weak (D) – 6 candidates

Showed Little Knowledge (E) – 2 candidates

Not Attempted (X) – 0 candidates.

Question 5 (20 marks)

Part (a) of the question tested knowledge and understanding and while the first part on verification of forward rates was well done, the final two parts of the question were not well handled. Candidates should be encouraged to show full working, including formulae being substituted into, in questions of this nature.

Part (b) of the question was well answered. Some candidates did not receive full marks on part (i) of this part because they did not include reference to the exchange of fixed for floating cashflows.

Part (c) of the question was not well handled. Many candidates did not answer the question directly. Instead they just listed well learned reasons for using the different products as opposed to answering the given question.

Final grades were distributed as follows:

Strong Pass (A) – 2 candidates

Pass (B) – 11 candidates

Slightly Below Standard (C) – 7 candidates

Weak (D) – 10 candidates

Showed Little Knowledge (E) – 5 candidates

Not Attempted (X) – 0 candidates.

Question 6 (15 marks)

This question led candidates through the reverse engineering of a capital guaranteed bond. The final part of the question tested candidates' ability to apply a binomial tree in a different situation to that with which they would have been familiar.

The performance on this question was good. Candidates had clearly practised reverse engineering as part of their preparation for this exam and were rewarded for having thought through these calculations carefully prior to the exam.

Parts (a) – (c) were very well answered by the majority of the candidates. Part (d) was well answered by about half of the candidates. Those who were unable to provide a good answer to part (d) tended to provide a solution that applied binomial tree valuation to a more standard option valuation instead of the capital guaranteed bond required for this question.

Final grades were distributed as follows:

Strong Pass (A) – 11 candidates

Pass (B) – 13 candidates

Slightly Below Standard (C) – 4 candidates

Weak (D) – 4 candidates

Showed Little Knowledge (E) – 3 candidates

Not Attempted (X) – 0 candidates.

6B Course Chief Examiner's Report Semester 2 2008

1. Summary

1.1. Pass Rates

18 Candidates enrolled for the Semester 2 2008, Global Retirement Income Systems (6B) exam. All presented at the exam. The assessment comprised one assignment worth 15% and an exam worth the remaining 85%.

It is proposed that 10 Candidates be awarded a pass, which implies a pass rate of 56%. This compares with a pass rate of 58% for the 2008, Semester 1 exam.

1.2. Candidate Numbers

The Candidate numbers can be summarised as follows:

Table 1 – Candidate Numbers

	Number of candidates
Originally enrolled	18
Withdrawn prior to exam	0
Absent from exam	0
Presented at exam	18
Passed	10
Failed	8

The analysis by examination centre is as follows:

Table 2 – Analysis by Examination Centre

Centre	Presented	Passed	Pass Rate
Sydney	7	5	71%
Melbourne	4	1	25%
Perth	2	2	100%
Brisbane	1	0	0%
Other	4	2	50%
Total	18	10	56%

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: Debra Lewis
Assistant Examiner: Jim Repanis

3. Examination Papers and Assignments

3.1. Degree of Difficulty and Course Coverage

The following tables show the distribution of questions and marks by level of difficulty and course coverage:

Table 3 – Degree of Difficulty of Exam

Question	Units	Knowledge & Understanding	Straight-forward Judgement	Complex Judgement	Total Marks
1a	13		1		1
1b	13		1		1
1c	13			6	6
1d	13		2		2
2a	5, 7, 8	5	5		10
2b	5, 7, 8			11	11
2c	5, 7, 8		4		4
2d	5, 7, 8			2	2
3a	9, 10, 12	5			5
3b	9, 10, 12		6		6
3c	9, 10, 12	3	6		9
3d	9, 10, 12		6		6
4a	14		6	3	9
4b	14			5	5
4c	14			2	2
5a	1	6			6
5b	1			3	3
5c	3			3	3
5d	3			3	3
5e	3			3	3
5f	4		3		3
Total		19	40	41	100

Table 4 – Course Coverage

Question	Units	Knowledge & Understanding	Straight-Forward Judgement	Complex Judgement	Total Marks
1	13		4	6	10
2	5,7,8	5	9	13	27
3	9,10,12	8	18		26
4	14		6	10	16
5	1,3,4	6	3	12	21
Total		**19**	**40**	**41**	**100**

Based on the table above, questions 1 & 4 required judgment (SJ & CJ) rather than simply knowledge. Few candidates achieved a pass grade on those questions. Question 3 did not require complex judgment and almost three quarters of candidates attained pass grades. Questions 2 and 5 required a degree of complex judgment, with slightly less than half of candidates gaining a pass grade. The different degrees of difficulty (and weighting by total marks) were taken into account in assessing borderline cases.

Table 6 – Pass Rates

	Ass 1	Q1	Q2	Q3	Q4	Q5
Pass	76%	28%	39%	72%	29%	56%
Fail	24%	72%	61%	28%	71%	44%

3.5. Overall Performance

Overall candidates did well in question 3. This covered a tool to project retirement benefits to a future date. The question involved largely knowledge and understanding with only some judgment involved.

Question 2 on pension scheme risks, and question 5 on the trend from DB to DC were both answered reasonably well by almost half the candidates.

Question 4 was wordy, encouraging candidates to consider DB funding in an abstract way. Many candidates were able to get a good proportion of the marks though most fell short of the pass mark.

Question 1 covered executive options and the Black & Scholes valuation method. This was generally answered poorly, with only 3 students achieving a pass. Question 1 was worth 10 marks (i.e. less than 10% of the weighted score)

3.6. Question by Question Analysis

Question 1

The question covered options as part of executive remuneration.

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	13.5	68%	0	0%

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Pass	9.0	45%	5	28%
Slightly Below Standard	6.5	33%	6	33%
Weak	4.0	20%	7	39%
Showed Little Knowledge	0.1	1%	0	0%
Did Not Attempt	0.0	0%	0	0%
Maximum Mark	11.0	55%		
Average Mark	7.0	35%		
Standard Deviation	2.2	11%		

Parts a, b and d were generally well answered by most candidates because they were straightforward bookwork questions. However, no candidates properly understood the question in part c *(Explain how the Profit/Loss Expense of share based remuneration is determined under IFRS2 / AASB2). What is the rationale?)*. They did not work out that question was asking for the steps in the P&L expense. Perhaps the question could have been worded differently to give students more guidance on what was required. As a result, Question 1 was poorly answered as a whole *(with part c comprising 60% of the mark)*.

Question 2

The question covered pension scheme risk

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	39.0	72%	3	17%
Pass	34.0	63%	5	28%
Slightly Below Standard	24.5	45%	10	56%
Weak	2.0	4%	0	0%
Showed Little Knowledge	0.1	0%	0	0%
Did Not Attempt	0.0	0%	0	0%
Maximum Mark	42.0	78%		
Average Mark	32.7	61%		
Standard Deviation	4.6	9%		

- 2(a) the majority of candidates were able to list a reasonable number of risks and explain their relevance
- 2(b)(i) most candidates were able to make reasonable arguments here
- 2(b)(ii) not many candidates followed the approach taken (scholastic model) in the model solutions, however they were usually able to make some sensible comments
- 2(b)(iii) the issues and problems were generally not well answered and this area caused candidates the most difficulty
- 2(c) most candidates were able to identify advantages and disadvantages. The marking guide gave quite generous marks for each advantage/disadvantage
- 2(d) candidates struggled to gain all the relevant points (at half a mark each) however most made a reasonable attempt

Overall there were no candidates who warranted a grade D or below

Question 3

The question covered a tool for projecting retirement benefits.

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	38.0	73%	6	33%
Pass	32.0	62%	7	39%
Slightly Below Standard	26.0	50%	4	22%
Weak	20.0	38%	1	6%
Showed Little Knowledge	0.1	0%	0	0%
Did Not Attempt	0.0	0%	0	0%
Maximum Mark	43.5	84%		
Average Mark	34.6	67%		
Standard Deviation	4.8	9%		

No marker comments.

Question 4

The question covered funding and investment strategy.

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	23.0	72%	1	6%
Pass	16.5	52%	5	28%
Slightly Below Standard	9.0	28%	9	50%
Weak	4.0	13%	2	11%
Showed Little Knowledge	0.1	0%	0	0%
Did Not Attempt	0.0	0%	1	6%
Maximum Mark	23.0	72%		
Average Mark	13.4	42%		
Standard Deviation	5.3	16%		

Part a) was not well answered in most cases – few if any got all levers, many only had one-sided actions (e.g. contribution holidays and not increased contributions, benefit reductions and not enhancements). In several cases the candidates identified monitoring processes or the way the journey plan would be developed (e.g. assumptions, funding methods, actuarial valuations) but not the levers for returning to the journey plan after actual experience caused deviation. Some even suggested methods of minimising the deviation (e.g. closing the fund), but did not realise the question was about "returning" a fund to the intended funding plan when experience got you off track. We do not think this was a lack of clarity in the question.

The responses to part b) were better, though many still missed the point about not being able to extract surplus (so reducing utility of generating surplus and therefore the risk/reward trade-off becoming skewed. Few mentioned the IFRS issue. The second part of this question was generally answered within the first part rather than as a separate statement

Part c) was also generally well answered, though some students didn't link the weak covenant to the inability to pay increased contributions, or only gave only half the answer (i.e. commented on a strong covenant and not a weak one, or vice versa).

Because of the poor response to part a) the pass rate for this question was quite low

Question 5

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The question covered the trend from DB to DC, and investment implications.

	Marks Required	% of Total Marks	Number of Candidates	Proportion of Candidates
Strong Pass	35.0	83%	1	6%
Pass	29.0	69%	9	50%
Slightly Below Standard	23.5	56%	1	6%
Weak	16.0	38%	6	33%
Showed Little Knowledge	0.1	0%	1	6%
Did Not Attempt	0.0	0%	0	0%
Maximum Mark	35.0	83%		
Average Mark	25.6	61%		
Standard Deviation	7.1	17%		

Most candidates scored close to full marks in section (a). Clearly, for six marks, it is reasonable to expect that you make at least six different points. Candidates who scored poorly tended to talk generally about the nature of defined benefit plans without enumerating the differences between DB/DC to explain the trend towards DC.

Sections (c) to (f) clearly directed candidates to consider ability and willingness to take on investment risk, and investor time horizons. Candidates who read the questions carefully and understood these issues could generally make two or three valid points for each section, and earn a "B" grade. Weaker candidates generally didn't address the questions directly, or just didn't "get" the points that were being made, and hence scored poorly.

C10 Course Chief Examiner's Report Semester 2 2008

1. Summary

The overall objectives of the Commercial Actuarial Practice (CAP) Course are, in summary, 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 contextualising actuarial solutions or approaches
- 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 judgement and on the communication skills of the students rather than on bookwork.

There are two separate pieces of assessment. The first assessment is based on participation in a one-week residential course and on completion of a case assessment in one of the traditional areas of actuarial practice on the last day of the residential course. The second assessment is a 2-hour examination on non-traditional areas of actuarial practice. Students are required to pass each of these assessments in order to pass the Module. Students who fail one or both of these assessments may be permitted to resit the assessment(s) they failed without completing the whole course again.

1.1. Pass Rates

Of the 73 candidates who presented for the case assessment, it is proposed that 50 be awarded a pass, which results in a pass rate of 68.5%. Of the 63 candidates who presented for the examination, it is proposed that 60 be awarded a pass, which results in a pass rate of 95.2%.

In total, out of the 87 candidates who presented for one or both of the assessments, it is proposed that 62 be awarded a pass in the course. This results in an overall pass rate of 71.3%. This is up on the three previous semesters of 49%, 67% and 57% respectively (most recent first).

At this time no analysis has been done to find possible reasons for the higher overall pass rate. One possible cause may be that there are more candidates who have passed earlier Modules attempting CAPS this Semester than in previous Semesters. The Course Leader will be investigating this and other possible causes.

In addition, it is proposed that 2 candidates be given a pass for the case assessment but a failure for the exam (one of these withdrew from the exam), and a further 18 candidates be given a pass for the exam but a failure for the case assessment.

It is difficult to draw any conclusions about differences in candidate performance between examination centres, given the small numbers at centres other than Sydney. A full summary of results is set out in Attachment 1.

A listing of the grades for each candidate is given in Attachment 2. This listing is based on the Institute scale: A, strong pass (65+); B, pass (50 – 65); C, slightly below (40 – 49); D, weak (25 – 39); and E, showed little knowledge (<25). These grades were derived from the marks awarded by the markers, as described later, and were not used directly as part of the assessment process.

1.2. Candidate Numbers

A total of 89 candidates were enrolled for one or both of the assessments in Semester 1 of 2008. Of these 73 presented for the case assessment, 52 of these 73 also attended the residential course and 63 candidates presented for the examination.

The candidate numbers can be summarized as follows:

Table 1 – Candidate Numbers

	NUMBER OF CANDIDATES	
	Case	Exam
Originally enrolled	74	65
Withdrawals	1	2
Absent	0	0
Presented	73	63
Passed	50	60
Failed	23	3

2. Examination Administration

2.1. Examiners

The examiners for this semester were:
Chief Examiner: Colin Westman
Assistant Examiner: Barry Leung

2.2 Course Leader

The assessment materials for the course were developed by a team, consisting of David Service (Course Leader), Jill Green, Richard Madden, Peter Martin, Colin Priest and Pat McConnell.

3. Assessment Piece 1 - Residential Course and Case Assessment

10% of the potential marks for Assessment Piece 1 were based on the candidates' participation during the first four days of the residential course. The participation was graded according to the effort demonstrated in preparing a report and discussion notes prior to the course and to the candidates' general participation in syndicate work and plenary discussions at the course.

90% of the assessment was based on a single question delivered in "case study" format at the start of the fifth day of the residential course. The candidates were given up to 8 hours (the fifth day of the course) to absorb the question material, perform all the necessary analysis and prepare their written response. The answer was required to be a substantial written report.

Candidates were required to select one case study question from one of the four defined traditional practice areas, i.e. life insurance, general insurance, global retirement income systems (GRIS) (previously superannuation) or investments. The assessment was open book, and candidates were allowed to bring any written material and software programmes to the session, but were not allowed any outside communication.

3.4. Results

The marks awarded for participation in the residential course varied between 4.4 and 7.8 out of 10. Only two candidates were given a FAIL mark for participation.

David Service advised that student preparation was generally good this Semester, including the quality of completion of the pre-work.

Also, there was still a wide range of contributions to the syndicates and the plenary discussions. However most students attempted to participate with varying degrees of success.

Candidates who sat the case assessment but did not attend the residential course this semester were awarded the marks gained for their previous participation in the residential course.

The proposed pass results for Assessment Piece 1 as a whole are shown by subject below:

Subject	Sat	Pass	Fail	Pass Rate (%)
Life Insurance	33	27	6	81.8
General Insurance	24	13	11	54.2
GRIS	5	1	4	20.0
Investments	11	9	2	81.8
Total	73	50	23	68.5

The overall pass rate for Semester 1, 2008 was 65.4%. The slightly improved pass rate this time is largely attributable to the higher pass rates for Life Insurance and Investments. The pass rates for both General Insurance and GRIS were much lower than previously.

3.5. Life Insurance

The Life Insurance case required candidates to advice the CEO of a life company on a number of issues in relation to a proposal to base some component of commissions on a share of the MoS profit generated by each intermediary.

Candidates were required to suggest a scheme and advise on possible changes in intermediary behaviour and the business generated. This case was ideal in that candidates were required to use imagination, technical skills and to predict possible intermediary responses.

Overall the quality of the papers was good, as evidenced by the high pass rate.

3.6. General Insurance

The General Insurance case required candidates as an internal actuary to a mainly property insurance company to advise on the purchase of a mainly motor insurance company. This target company was experiencing a credit squeeze.

An extensive amount of information was provided.

Candidates were expected to deal with a number of issues including the profitability of the target business, reserving and capital needs.

The standard of the papers was poor, as shown by the low pass rate. Among other things, candidates failed to do proper historical analysis and to notice the change in profitability following the introduction of the petrol voucher marketing scheme.

Further, candidates showed a very simplistic understanding of appraisal values.

3.7. GRIS

The GRIS case required candidates to advise some superannuation fund trustees on the possible outcomes (and range of outcomes) for a lifecycle investment option compared to those for a balanced investment option. Candidates were asked to suggest modifications to the lifecycle model after considering comments from the trustees.

The standard of the papers was very poor, as shown by the low pass rate.

3.8. Investment and Finance

The Investments and Finance case asked candidates to advise the Government on the methods and assumptions, which should be mandated for the preparation of annual projections of retirement benefits for members of superannuation funds.

Statements by ASFA and an actuarial body were provided to alert candidates to the practical issues. As well relevant financial data was provided.

This case required candidates to demonstrate an understanding of the difficulties of constructing an approach which is professionally adequate, yet simple enough for practical application.

Given the expected use of the report, communication was particularly important.

4. Assessment Piece 2 - Non-Traditional Exam

Assessment Piece 2 was a two-hour examination at the end of the semester. One question was offered in each of 4 non-traditional practice areas, i.e. banking, environment, enterprise risk management (ERM) and health. Each candidate was required to attempt 2 out of the 4 questions. Candidates were permitted to take any materials into the examination.

4.4. Results

The proposed marks for each candidate for Assessment Piece 2 as a whole are shown in Attachment 3. It is proposed that all those with a mark of 50 or more should pass. This means that 60 out of the 63 candidates who sat the exam should pass, or 95.2%. Students who did sufficiently well in one question to still achieve a mark in excess of 50 despite a fail in another question were not denied a pass if their weaker question was a marginal fail and did not contain gross errors of understanding.
The results by question are set out in the table below.

Question	Sat	Pass*	Pass Rate	Avg Mark A	Avg Mark B	Avg Mark
Banking	26	20	76.9	56.2	58.6	57.4
Environment	43	37	86.0	65.0	63.9	64.5
Health	15	11	73.3	58.3	58.3	58.3
ERM	42	41	97.6	64.6	63.1	63.9
All Questions	126	109	86.5%	62.3	61.9	62.1

This refers to the number of candidates who received a mark of 50 or more in the specific question

rather than those who passed the exam as a whole.

Overall, the pass rates on the individual questions were well above those normally experienced. The average pass rate of 86.5% on all questions was higher than the 67.1% in the last semester.

After reviewing a selection of papers I am satisfied the marking standard is sufficiently high.

4.5. Banking

Candidates were asked to advise on the risks to the future profits of Westpac by taking over St George. Some elementary information was provided on each of these Banks to help overseas candidates.

Answers were expected to show an understanding of how risks translate into profit impacts as well as identifying internal cultural issues.

Generally this question was well answered.

4.6. Environment

Candidates were asked to advise on an expenditure plan to reduce the carbon dioxide emissions from households, including defining objectives, identifying risks and barriers and monitoring progress.

This question was particularly well answered.

4.7. Health

Candidates were provided with some background information on potentially preventable hospitalisations, both in total and diabetes related. Further information was provided on variations in these statistics by State and population density. They were then advised the Federal Government planned to use money targeted for hospital support to instead finance improved diabetes management. The candidate then, as an advisor to the Victorian Government, had to do some analysis, among other things, and estimate the cost and savings to Victoria of the programme, recognizing that State's higher level of urbanisation.

This question had to be read carefully to pick up all relevant information. Not all candidates did this, leading to some poor analysis.

Generally however this question was better answered than in previous semesters.

4.8. Enterprise Risk Management

Candidates were provided with a real life risk (Bird Flu) and asked to advise on the risks to the business from Bird Flu, and how the Board should select and manage a Chief Risk Officer who would have these issues as one of their first projects.

This question was exceptionally well answered.

Attachment 1

Results by category

	Full course	*Case only*	*Exam only*	*Total*
Presented*	48	24	15	87
Passed case and exam	28			28
Passed case failed exam	1			1
Failed case passed exam	18			18
Failed both case and exam	1			1
Passed case only		20		20
Passed exam only			14	14
Course Pass rate %	58.3	83.3	93.3	71.3

* Excludes one candidate who presented for the case (and passed) and withdrew from the Exam.

Candidates have been classified based on the assessments they undertook, regardless of whether or not they attended the Residential Course.

Results by Assessment Piece

	Case	*Exam*	*Course**
Presented	73	63	87
Passed	50	60	62
Failed	23	3	25
Pass rate %	68.5	95.2	71.3

* Excludes one candidate who presented for the case (and passed) and withdrew from the Exam.

Results by Examination Centre

Centre*	*Case*			*Exam*			*Course**		
	Presented	Pass	Pass Rate (%)	Presented	Passed	Pass Rate (%)	Presented	Passed	Pass Rate (%)
Sydney	55	38	69	40	39	98	63	45	71
Melbourne	8	4	50	11	10	91	11	7	64
New Zealand	-	-	-	1	1	100	1	1	100
UK	3	2	67	4	4	100	4	3	75
Hong Kong	1	1	100	1	0	0	1	0	0
Singapore	4	3	75	4	4	100	5	4	80
Japan	2	2	100	2	2	100	2	2	100
Total	73	50	69	63	60	95	87	62	71

Note that all of the candidates completing the residential course physically sat the case assessment in Sydney. This analysis is based on home location (where the candidate sat the exam).
*Excludes one candidate who presented for the case (and passed) and withdrew from the Exam.