Institute of Actuaries of India

IAI Year 2005 Education Policy

Version 3.04

(Approved by Executive Committee in its meeting held on 08 12 2012) Objective

To develop actuaries of the future with appropriate skill sets for variety of roles including that of regulatory and business leadership in the financial services industry.

The Skill Sets of actuary of the future

IAI believes that the actuary of the future, in order to play key roles in the financial services industry, should have atleast the following skill sets,

- 1. Full appreciation, knowledge and understanding of actuarial principles & practices on an ongoing basis.
- 2. Ability to apply actuarial principles and practices to a variety of business problems in the financial services industry
- 3. Ability to apply actuarial principles and practices with a high degree of technical competence.
- 4. Orientation to assume business leadership responsibilities and discharge such responsibilities with commitment to serve the cause of public interest.
- 5. Commitment to professionalism in general and as it embeds in to the actuarial profession in particular.

IAI further believes that these skill sets are not static but need to be re-evaluated dynamically as needs of the financial services industry evolve and change over time.

Elements of Y 2005 Education Strategy

The required skill sets in the actuary of the future will be best developed if the following elements are embedded in the Education Strategy;

- 1. Prepare actuaries for a broadening range of roles to be performed nationally and internationally.
- 2. Acknowledge the increasing globalisation of the actuarial profession, particularly across national boundaries over which actuaries will work.
- 3. Acknowledge the need of, prepare for and deliver dynamically generalised actuarial knowledge and skills including business skills.
- 4. Acknowledge the need of, prepare for and deliver dynamically jurisdiction specific actuarial applications as a component of qualification at fellowship level for jurisdictions over which IAI education largely caters for.
- 5. Build and deliver an appropriate model of actuarial education, which embeds business skills explicitly.
- 6. Build and deliver an appropriate model of actuarial education, which provides all what is needed of an actuary at fellowship level and the time horizon over which such qualification takes place is about 5 (five) years.
- 7. Build and deliver an appropriate model of actuarial education, which recognises need for and takes in to account the fact that actuarial education as it progresses towards fellowship need to take place in a working context.
- 8. Recognise the need for and maintain at all times the standards of education in relation to and along with other major actuarial professional bodies.

9. Recognise need for and maintain at all times the standards of Professionalism in co-ordination with other major professions such as Medicine, Law, Accountancy and similar.

Year 2005 Education model

As annexed.

Education Policy Administration Issues

- 1. IAI shall conduct examinations at all levels as is the current practice.
- IAI may outsource the production of reading material for all subjects except those that pertain to Specialist Application (SA) group of subjects, to ActEd in UK, which course material is in compliance with the syllabus requirements of IAI and meets the standards of education policy. IAI will achieve this by working closely with UK Actuarial Profession (IFA).
- 3. For formulation of syllabus and core reading for all subjects except those that pertain to Specialist Application (SA) group of subjects, IAI will work closely with IFA so as to ensure that subject specific mutual exemption as well as mutual recognition at fellowship level is maintained at all times, between the bodies.
- 4. IAI shall formulate syllabus and develop core reading for subjects under SA group for India-specific applications as well as for those jurisdictions over which IAI has a significant number of students.

Annexure

Year 2005 Education Model

2005 has seen the introduction of a new structure for the actuarial examinations – one of the most far-reaching changes for many years. Not only are the exams being updated to reflect the broadening range of areas in which actuaries are involved, but there has been a real focus on what knowledge and skills – including business skills – are needed at each stage.

The Year 2005 Education Model as against the earlier one (existing till year 2004) implies;

- More focus on the core principles of actuarial work and the ability to apply them in a variety of situations;
- Less emphasis on knowing details of *all* the main actuarial areas (including those which students may never plan to work in);
- * Building on the financial economics techniques included in the current syllabus
- Recognition that wider business skills are important for the modern actuary there will be an introductory business awareness module effective for students enrolling on and after 01 07 2004 and a more structured work experience requirement.
- Renewed focus on work based skills.

The Education

CORE TECHNICAL STAGE (CT)

The Core Technical Stage is designed to give students a solid grounding in the key actuarial techniques. There are 9 subjects, similar to the earlier 100 series. This stage is perhaps the one with least change from the earlier exams, but content has been made more challenging to make sure techniques are up to date and relevant to at least two of the later subject areas. Material which is important in only one subject area has generally been moved to the relevant Specialist Technical subject (ST).

| Old Subject | New Subject | New Subject Title+ |
|-------------|--|--|
| 101 | CT 3 | Probability and Mathematical Statistics |
| 102 | CT 1 | Financial Mathematics |
| 103 & 104 * | CT 4 | Models |
| 104 a | Abolished effective Nov. 2004 Exam Diet | - |
| 105 | CT 5 | General insurance, Life and Health Contingencies. |
| 105 a | Abolished effective Nov. 2004 Exam Diet | - |
| 106 | CT 6 | Statistical Methods |
| 107 | CT 7 | Economics |
| 108 | CT 2 | Finance and Financial Reporting |
| 109 | CT 8 | Financial Economics |

* Subject is to be set in two halves (ie one-and-half-hour exam each on old 103 and old 104 syllabus) for exam Diets in year 2005 & year 2006 to help transitional arrangements. Students who have not passed 103 and 104 need to take both papers at one time.

All the subjects will be examined as hereto fore i. e time constrained 3-hour unseen examinations. CT9 - **Business awareness Module**

A business awareness module will be assessed through attendance at a 2-day introductory course and by on course assessment. This is be effective for students who enrolled on and after **01 07 2004.** They need to take this module and it has to be completed within 30 months of enrolment as student. The time limit for those students who registered before 1st July 2005 has been extended to December 2007.

CORE APPLICATIONS STAGE (CA)

The principle of the Core Applications Stage is to teach actuarial concepts (e.g. risk, funding, reserving, etc) across a range of subject areas rather than each subject area separately – Australia has adopted this approach for several years and the aim is to encourage thought about how these concepts can be applied, in both familiar and unfamiliar situations.

The main Core Applications Concepts subject will be assessed by two papers covering assets, liabilities and asset-liability management. The two papers will be added together to give a single mark for:

CA1 Core Applications Concepts

During the transition period, which is to last at least two years (November 2006), the two papers will cover designated parts of the syllabus:

- **CA11** paper on assets (corresponds to earlier 301)
- **CA12** paper on liabilities and asset-liability management (corresponds to generalised aspects of 302, 303 & 304)

In making the choice for credit the student will need to consider the Specialist Technical stage as well. The CA1 papers may only be taken separately by students who have an exemption through transition from one paper. Care will be taken not to disadvantage students who only have to take one paper in the transition.

Note: Students who do not have any credit in 300 series will have to take CA11 and CA12 together which is of 3 hours each unseen examinations. If the student passes only one paper out of the two then he has to appear for both the examination again.

Where CA11 (the assets paper) and CA12 (the liabilities and asset-liability management paper) are taken together an aggregate mark will be given as these will be treated as one subject in the new strategy.

CA2 Modelling

There is to be a Modelling course and the aim of this course is to ensure that a candidate has data analysis skills and can communicate the results to a technical audience. It will involves use of spreadsheets for producing models from given data sets. Students will be assessed at the end of the course, which will be held at designated locations.

Students who have atleast one pass credit in the 300 series exam in the earlier system need not take this exam. However for this purpose a pass credit in 305 (Indian Insurance Regulations) will not be considered as valid pass for exemption from modelling. Thus students who have pass credits in one or more out of 301,302,303 and 304 need not take this exam.

Eligibility: A student who has passed at least 5 subjects of CT examination or then earlier equivalents and seriously attempted remaining 4 subjects of CT examination can be enrolled for this subject.

CA3 Communications

The aim of the communications paper is to ensure that a candidate can communicate with a non-technical audience. The nature of question consist of draft a letter/report/memo, correct a draft letter, redraft a report for different audience, draft presentation slide and draft an email. The paper will consist of two questions and will be of 2.5 Hrs. duration.

SPECIALIST TECHNICAL STAGE (ST)

This stage builds on the Core Applications Stage but in individual specialisms (non-jurisdiction specific). Choice is introduced at this stage. The student will choose 2 subjects from the 6 offered:

| New Subject Code | New Subject Title | Old Subject Code |
|-----------------------------------|---|---|
| ST1 (from Nov. 2005 Exam Diet) | Health and Care | - |
| ST2 | Life Insurance | 302 |
| ST3 | General Insurance | 303 |
| ST4 | Pensions and other employee Benefits | 304 |
| ST5 | Finance and Investment A | 305 (UK, IAI did not have this subject) |
| ST6 | Finance and Investment B | |

Each specialist technical subject will be assessed by one 3-hour time constrained unseen paper.

Students will have a choice as to how to translate the 300 series subjects that they have already passed into credits in the new Core Applications stage and Specialist Technical stage. Some basic rules as under will apply:

- 1. Anyone with all four of the 300 series (i. e. 301, 302, 303 & 304) subjects will be assumed to have passed the Core Applications Concepts subject and two Special Technical subjects.
- 2. 301 will correspond only to the assets part of the Core Applications Concepts subject.
- 3. Students will only be allowed to use each 300 series subject they have passed once and cannot take the equivalent paper again in the new strategy.

A student with 302 for example can choose whether to count this as CA12 Core Applications Concepts (the liabilities and asset-liability management paper) or ST2 Life Insurance Specialist Technical. However if CA12 Core Applications Concepts (the liabilities and assetliability management paper) is chosen the student cannot then take ST2 Life Insurance Specialist Technical. Similar situations exist for 303 which corresponds to ST3 General Insurance Specialist Technical and for 304 which corresponds to ST4 Pensions and Other Benefits Specialist Technical.

Each 300 series will only be allowed to count once in the transition thus:

| 301 | | CA11 and CA2 |
|-----|---------------|-----------------------------|
| 302 | \rightarrow | (CA12 + CA2) or (ST2 + CA2) |
| 303 | | (CA12 + CA2) or (ST3 + CA2) |
| 304 | > | (CA12 + CA2) or (ST4 + CA2) |

Where a Specialist Technical (ST) subject is required, the corresponding 300 series subject pass cannot be also be used to gain credit in another subject. Moreover, a

student will not be allowed to retake a subject that he or she has passed as the 300 series subject equivalent. Thus someone with e.g. 302 can count this against ST2 Life Insurance Specialist Technical or part of Core Applications but not both. If they choose to count it against part of Core Applications they cannot then take ST2 Life Insurance Specialist Technical. Subject to these Constraints, the student will be allowed to choose the position in the new strategy based on previous 300 series subjects passed.

| | Passed | Credits | Still to take |
|------|---------------------------------|-----------------------------------|--------------------|
| All: | 301 + 3 out of 3 others | CA11+ CA12 + CA2 + 2 × ST | - |
| | 301+2 out of 3 others | Either CA11 + CA12 + CA2 + 1 ST | 1 × ST |
| 3: | | [OR] CA11 + CA2 + 2 × ST | CA12 |
| | 3 out of 4 × 300 but not 301 | CA12 + CA2 + 2 × ST | CA11 |
| | 301+ 1 out of 302- 304 | Either CA11+ CA12 + CA2 | 2 × ST |
| 2: | | [OR] CA11+ CA2 + 1 × ST | CA12, 1× ST |
| 2. | 2 Out of 302-304 but not | Either 2 × ST + CA2 | CA11+CA12 |
| | 301 | [OR] CA12 + CA2 + 1 × ST | CA11, 1 × ST |
| | 301 | CA11 + CA2 | CA12, 2 × ST |
| 1: | 1 from 302-304 | 1 × ST + CA2 | CA11 + CA12, 1× ST |
| | | [OR] CA12 + CA2 | CA11, 2 × ST |

Credits for 300 series subjects will be given according to the following table:

SPECIALIST APPLICATIONS STAGE (SA)

The final stage of the examinations is **one specialist** (India-specific or other jurisdiction specific to be allowed from a later date) subject chosen from:

| New Subject Code | New Subject Title | Old Subject Code |
|-------------------|---|------------------|
| SA1 (from Y 2006) | Health and Care | - |
| SA2 | Life Insurance | 402 |
| SA3 | General Insurance | 403 |
| SA4 | Pensions and other employee Benefits | 404 |
| SA5 (from Y 2006) | Finance | |
| SA6 | Investment | 401 |

There will only be one compulsory paper and the main assessment will be one 3-hour time constrained unseen paper There is no requirement to have passed the corresponding specialist technical subject; however, the Specialist Applications subjects will typically assume knowledge of the corresponding Specialist Technical subject (and SA5 and SA6 may each assume knowledge of both ST5 and ST6).

Work Based Competencies

Students will be required to maintain a logbook of work undertaken and of courses attended as part of the development of work based competencies. This will include some technical actuarial skills as well as more general business and management skills.

| Qualification | Require | ed | |
|---|-----------------|--------------------------------|------------------|
| Certificate in Actuarial Techniques | All CT | | |
| (CAT) | | | |
| | | | |
| Diploma in Actuarial Tech | niques (I | DAT) | |
| Diploma | | Required | |
| Diploma in Actuarial Techniques - Healt | h Insurance | All CT + CA 3 + ST 1 | |
| (DAT – Health) | | | |
| Diploma in Actuarial Techniques - Life | e Insurance | All CT + CA 3 + ST 2 | |
| (DAT – Life) | | | |
| Diploma in Actuarial Techniques - Pens | ions (DAT – | All CT + CA 3 + ST 4 | |
| Pensions) | | | |
| Diploma in Actuarial Techniques - | Finance & | All CT + CA 3 + ST 5 Or ST 6 | |
| Investment (DAT – Finance) | | | |
| Diploma in Actuarial Techniques | - General | All CT + CA 3 + ST 7 Or ST8 | |
| Insurance (DAT – Non Life)* | | | |
| Diploma in Actuarial Techniques - Ent | erprise Risk | All CT + CA 3 + ST 9 | |
| Management (DAT – ERM)* | | | |
| Associate (AIAI) | All CT + All CA | | |
| ⁻ ellowship (FIAI) | All Subject | All Subjects + | |
| | | | |
| | | wship Seminar + | |
| Work based experience as under; | | | |
| | Applicatio | on for admission as FIAI date: | Minimum number |
| | | | of years of work |
| | | | based |
| | | | experience |
| | | | required: |
| | | On or after 01 01 2008 | Three (3) years |
| | | On or after 01 01 2007 but | Two (2) years |
| | | before 01 01 2008 | |
| | 3. | On or after 01 01 2006 but | One (1) year |
| | | before 01 01 2007 | |
| | 4. | Before 01 01 2006 | None |

Qualification There will be four levels of Qualification as under;

Notes:

- (i) An Associate member admitted prior to June 2005 Exam Diet even though not qualifying for exemption in CA subjects will continue to be considered as an Associate member. However, the change in the eligibility standards for associateship will not award such a candidate any additional exemption more than what he/she is eligible for based on his/her pass credits.
- (ii) The work based experience could be pre and/or post application date for admission as FIAI.
- (iii) Student/Associate member who has attended India Fellowship Seminar will needs to complete all the remaining examinations leading to fellowship within 18 months of attending the seminar; otherwise they will loose credit for the same.
- * As approved in council meeting held on 08-Dec-2012

TRANSITION ARRANGEMENTS

Summary of the mapping from old to new is as follows,

