INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

15th November 2010

Subject SA3 – General Insurance

Time allowed: Three hours (9.45* - 13.00 Hours)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

- 1. Please read the instructions on the front page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception
- 2. * You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.
- 3. You must not start writing your answers in the answer sheet until instructed to do so by the supervisor
- 4. The answers are expected to be India Specific application for the syllabus and corresponding core reading. However, substantially the core reading material is still taken from material supplied by Actuarial Education Company which are meant for UK Fellowship examination. The core reading also contains some material which is India Specific, mostly the IRDA regulation. In view of this, it should be noted that focal point of answers is expected to be India Specific application. However if application specific to any other country is quoted in the answer the same should answer the question with reference to Indian environment.
- 5. Attempt all questions, beginning your answer to each question on a separate sheet.
- 6. Mark allocations are shown in brackets.

AT THE END OF THE EXAMINATION

Please return your answer book and this question paper to the supervisor separately.

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Q. 1) A large business house in India, in collaboration with a foreign partner has decided to set up a general insurance company in India. A project group has been formed with representation from both parties and they are working on the business plan before starting the regulatory process of filing for approval. The project team has approached you for professional advice in your capacity as a Consulting Actuary in India.

The project team would like you to advise them on the following issues:

- (a) Determining the level of capital it would require in order to support its business.
 - (i) State, with reasons, the information you would require before giving advice.
 - (ii) Outline the points that you would make when presenting the advice to the project group. (11)
- (b) The Finance Head of the project group is interested to explore the possibility of allocating capital to different lines of business and would like guidance from you on this issue.
 - (i) Explain the benefits of this approach. (8)
 - (ii) Discuss some risk measures that can be used to allocate capital to different lines of business. (15)
- (c) Insurewell General Insurance has been in business for the last 6 years and has a predominantly motor book. The Strategy Head of the project group has identified Insurewell as the main competitor for the proposed company. He has done a competitor analysis based on the information published on regulators website. He has concluded that since the solvency margin of Insurewell has fallen from its previous level while the margins for many other companies have increased, Insurewell is facing future insolvency. The Strategy Head expects you to validate this statement. Draft a response explaining whether the Strategy Head is right in his conclusion.

(20)

(8)

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Q. 2) A general insurance company in India has been writing a small portfolio of domestic household business for the last 5 years. At the end of the last financial year the portfolio contributed 3% of the total premium of the company. The company now wishes to increase the size of this portfolio to around 10% over the next 2 to 3 years. The company is considering the following two proposals in order to register the targeted growth. You are the actuary of the company advising them on pricing and reinsurance matters.

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A. Establish a direct helpline to enable customers to secure simple standardized covers under household domestic insurance.

- B. Add a new feature in the existing policy providing for a loyalty bonus to a policyholder at the rate of 3% on premium paid at last renewal or taking out the policy. The loyalty bonus will however be subject to a limit in such a way that the policyholder has to pay at least 75% of the corresponding premium paid by a new policyholder.
 - (i) Describe how you would determine the premium rates the company might charge in order to accept both the proposals. (23)
 - (ii) Discuss the issues the company may consider while accepting proposal B above. (9)
 - (iii) If instead of accepting proposal B, the company desires to introduce a no claim bonus as in the case of motor business what are the issues to be considered? (6)

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