

# INSTITUTE OF ACTUARIES OF INDIA

## EXAMINATIONS

**29<sup>th</sup> October 2007**

**Subject SA3 – General Insurance**

**Time allowed: Three Hours (09:45\* – 13.00)**

### *INSTRUCTIONS TO THE CANDIDATE*

1. *Do not write your name anywhere on the answer scripts. You have to write only your Candidate Number on every answer script.*
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 have then three hours to complete the paper.*
3. *Mark allocations are shown in brackets.*
4. *You must not start writing your answers in the answer papers until instructed to do so by the Supervisor.*
5. *Attempt all questions, beginning your answer to each question on a separate sheet.*
6. *Fasten your answer sheets together in the numerical order of the questions.*
7. *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.*
8. *In addition to this paper you should have available Actuarial Tables and your own calculator.*

### **Professional Conduct:**

“It is brought to your notice that in accordance with provisions contained in the Professional Conduct Standards, if any candidate is found copying or involved in any other form of malpractice, during or in connection with the examination, disciplinary action will be taken against the candidate which may include expulsion or suspension from the membership of IAI.”

**Candidates are advised that a reasonable standard of handwriting legibility is expected by the examiners and that candidates may be penalized if undue effort is required by the examiners to interpret scripts.**

***AT THE END OF THE EXAMINATION***

***Hand in BOTH your answer script and this question paper to the supervisor separately.***

**Q. 1)**

- a) A private general insurance company wants to grow inorganically by acquiring some other general insurance company. As an Actuary, you have been requested to give a report on the advantages /disadvantages of taking over another general insurance company. State the points for your report. (10)
- b) Describe how you can arrive at a purchase price for such an acquisition? (20)
- c) State other factors that should be considered when deciding upon the price to be offered? (5)

**[35]**

- Q. 2)** A private general insurer writes just employer's liability and house hold insurance business. The CEO has requested you to review the investment strategy and give a report on the principles of suitable investment policy for this company and your choice of asset allocations giving reasons. The balance sheet and the revenue account is given below:

**Balance Sheet**

Reserves	Household Rs. in crores	Employers Liability Rs. in crores
Out standing claims & IBNR	50	300
UPR	250	75

**Revenue Accounts**

	House hold	Employer's Liability
Outstanding and IBNR b/f	40	270
UPR b/f	175	75
Premiums	500	150
Claims paid	350	100
Expenses	50	15
outstanding and IBNR c/f	50	300
UPR c/f	250	75
Underwriting result	15	5

The company has total assets of Rs1200 crores. Ignore reinsurance. Solvency margin may be assumed at 20% of the premiums or 30% of incurred claims, whichever is higher.

- a) Draft your report. (40)
- b) An Actuarial student who has joined you recently suggests that in view of the positive cash flow, the entire investments should be in equities and properties, as there may not be any need to realise assets to meet liabilities. Discuss the points that you would make to him. (10)

**[50]**

- Q. 3)** What types of accumulation of risk can arise in the following class of business:
- i) Employer's liability
  - ii) Domestic Household business
  - iii) Which are the functions affected by the accumulation of risks and briefly describe the effects.

[15]

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