

# Actuarial Society of India

## EXAMINATIONS

09<sup>th</sup> November 2006

Subject CA12 – Liability and Asset Liability Management

Time allowed: Three Hours (02.15\* - 05.30 pm)

### *INSTRUCTIONS TO THE CANDIDATE*

- 1. 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.*
- 2. You must not start writing your answers until instructed to do so by the supervisor.*
- 3. The answers are not expected to be any country or jurisdiction specific. However, if examples/illustrations are required for any answer, the country or jurisdiction from which they are drawn should be mentioned.*
- 4. Mark allocations are shown in brackets.*
- 5. Attempt all questions, beginning your answer to each question on a separate sheet.*
- 6. Fasten your answer sheets together in numerical order of questions. This, you may complete immediately after expiry of the examination time.*

### **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 ASI.”*

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.***

- Q.1)** You are the actuary advising a life insurance company that is planning to rapidly increase its market share in terms of new business premium income. Identify the various parties that are affected by your advice, and also state how they are affected. [9]
- Q.2)** Outline the different ways in which the State can help to ensure that all individuals have adequate benefit provision. [7]
- Q.3)** It has been suggested that the security of members' benefits in a defined benefit pension scheme could be enhanced by issuing detailed disclosure of information to all members.
- (a) Discuss how the introduction of regulations requiring the disclosure of information to members could increase security for members. (3)
- (b) List three possible pieces of key information that could be issued to members to achieve the objective of increasing security and outline the main advantages and disadvantages of issuing this information to members. (6)
- [9]
- Q.4)** You work in a major general insurance company that covers a wide range of risks in various countries. The company has a computerised policy administration system that handles claims administration.
- Give examples of errors which might be made in entering data into a computer claims system, and suggest automatic proceedings which would reduce the probability of them occurring. [5]
- Q.5)** You are an actuarial student in a life insurance company and have been nominated to be a part of a project team responsible for setting up a new policy administration system. You have been asked to assist with documenting for the project.
- Describe the key documents that are necessary for any project, and give brief details of the contents and uses of these documents. [9]
- Q.6)** A life insurance company has sold unit-linked whole life contracts for several years through insurance intermediaries. The company has no with profits business. It has decided to market a range of without profits term assurance contracts through the same distribution channel.
- The sum insured will be payable on the earlier of death or on the diagnosis of one of a specified number of diseases. Cover will be available for a fixed term, which is selected at outset.
- (a) Describe the principal risks that the company faces in adopting this course of action. (10)
- (b) Identify ways in which the company could reduce its exposure to these risks. (7)
- [17]

- 
- Q.7)** You are the actuary to a company that has asked you to advise on setting up a post retirement medical plan for its senior staff.
- (a) Describe 3 ways in which this benefit could be financed. (12)
  - (b) State with reasons which method you would recommend. (2)
- [14]**
- Q.8)** It has been suggested that a life office should use industry statistics to estimate lapse rates appropriate for pricing future product launches rather than analysing its own experience.
- (a) Explain why lapse rates are important in product pricing. (4)
  - (b) Explain why the suggestion above may be inappropriate. (6)
- [10]**
- Q.9)**
- (a) Explain why the surplus/deficit arising between successive valuations of a retirement benefit scheme would be analysed. (4)
  - (b) Describe the steps that would be followed to perform such an analysis. (5)
- [9]**
- Q.10)** List the reasons why general insurance claims experience may vary from that assumed in the premium basis. (6)
- [6]**
- Q.11)** A benefit scheme is being discontinued.
- (a) List the options available for provision of the outstanding benefit payments. (2)
  - (b) Describe what impact each option may have on the benefits that could be provided. (3)
- [5]**

\*\*\*\*\*