

# INSTITUTE OF ACTUARIES OF INDIA

## EXAMINATIONS

28<sup>th</sup> May 2012

### Subject SA1 – Health and Care Insurance

Time allowed: Three hours (9.45\* - 13.00 Hrs)

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.*
7. *Please check if you have received complete Question Paper and no page is missing. If so, kindly get new set of Question Paper from the Invigilator.*

AT THE END OF THE EXAMINATION

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

- Q. 1)** You are heading the actuarial team in a health insurance company which has a large portfolio of well diversified retail customers in an annually renewable inpatient indemnity product. You have been entrusted with a task to compute “Customer Lifetime Value” for different segments of portfolio.
- A)** What do you think could be the use of such an exercise? (4)
- B)** How would you go about completing this exercise? Mention the important steps involved. (10)
- C)** How does this compare with the Embedded Value concept? (3)
- [17]**
- Q. 2)** A General Health Insurance Company in India has a significant marketing strength and large portfolio in Motor and Fire and wants to enter into Health Insurance. They feel that the concept of “Badging” can be of great help to them
- A)** Explain how Badging works? (3)
- B)** What are the advantages and disadvantages of this approach? (6)
- C)** What could be an alternative to this approach? In which scenario is an alternative approach more suitable? (4)
- [13]**
- Q. 3)** You are an actuary of an insurance company with a significant portfolio of PMI product. The Marketing department of your company feels that in order to make the existing product more attractive we should start covering alternative system of medicine as well, like, Ayurveda, Naturopathy, Homeopathy, Acupressure, etc.
- A)** What do you think are the product development and pricing considerations while providing such benefit? (6)
- B)** What safeguards would you provide in the product to protect long term interest of the company? (4)
- [10]**
- Q. 4)** You are an actuary of an insurance company dealing in inpatient indemnity product. The overall average claim size of said product has increased from Rs. 25,100 in 2010 to Rs. 30,200 in 2011. One of your colleagues feels that we should file price revision of the product without any delay to counter the inflationary trend shown by the sharp increase in average claim size. He is also of the opinion that upward revision in premium should be around 20% throughout all plans. What will be your course of action in this situation?

**[10]**

- Q. 5)**
- 1) Explain the two approaches to underwriting a medical reimbursement product:
    - (1A) Full medical underwriting , and (6)
    - (1B) Moratorium underwriting (6)
  - 2) What are the advantages and disadvantages to policyholder under the approach of moratorium underwriting? (5)
  - 3) What are the challenges that are faced by insurance companies adopting moratorium underwriting and what could be the possible solution to overcome those challenges. (7)
  - 4) What could be the possible reasons to try this approach of underwriting in India? (3)
- [21]**
- Q. 6)**
- A) What is the difference between renewability and reviewability in the context of health contracts? (4)
  - B) Explain the various types of reviewable and renewable health contracts which exist in life, general and standalone insurance companies in Indian context? (2)
- [6]**
- Q. 7)**
- A) What are the common exclusions that are relevant in the context of a medical reimbursement policy? (3)
  - B) You are Chief Actuary of an insurance company with substantial portfolio of health insurance policies in India. Suppose regulator has come up with a draft regulation that intends to do away with the common exclusion under health policy and cover people living with HIV/Aids (PLHA) based on demand from government bodies and public authorities. The gist of the draft regulation is:
    - There cannot be outright denial of cover to PLHA, rather insurance companies need to have in place clear cut underwriting policy for PLHA based on severity of disease
    - Insurance companies are allowed to charge additional loading to PLHA based on different stages of disease.
    - No claim should be denied for a person who turns HIV positive during the course of policy. Moreover, in such cases policy renewal can also not be denied although premium can be loaded based on underwriting policy.

The regulator has asked views from the insurance industry in this matter. As a representative of an insurance company in your professional capacity how would you put forth arguments for or against this circular to the regulator?

(20)

**[23]**

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