

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

05th November 2014

Subject SA1 – Health and Care Insurance

Time allowed: Three hours (14.45* - 18.00 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 you are required 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 candidate 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) Discuss advantages and disadvantages of cashless system of claim settlements compared to reimbursement system of claims in India from both the insured and insurer's perspective. **[8]**

Q. 2) Your insurance company has tie-up with a bank through which your company has been selling its flagship retail PMI product to Bank's customers since last few years. Recently, the Bank has approached your company requesting for designing a voluntary customized group policy (non-employer-employee) exclusively for its customers where premium will be paid by customers of the Bank.

Two main changes (from the Retail PMI product) requested are waiting period waiver and increase in default age criteria of pre-acceptance medical check from age 46 to age 55 (unless pre-existing diseases are disclosed in the proposal form, in those cases Medical test requirement triggers irrespective of age of applicant).

i) Discuss the fundamental differences between a corporate group policy (employer-employee) and a customized group policy (non-employer-employee). **(5)**

ii) Discuss the risk factors that the company needs to consider before taking the final decision. **(10)**

iii) Explain ways in which company could address some or all of those risks. **(10)**

iv) Do you expect that morbidity experience of the retail product pertaining to bank customers may differ from that of rest of the customers of the same retail product? If so, state the possible reasons. **(3)**

v) Outline the overall approach in deriving the final premium for the proposed group policy. **(8)**
[36]

Q. 3) You are the consulting actuary specializing in the mergers and acquisitions of the health insurance companies.

A specialized health insurance company "Care-Health" has been writing the Long Term Care insurance and Income Protection cover business for many years. This company has recently been put up for sale. A major health insurance company in the country "Care-All" has been invited to bid for the business of "Care-Health". You have been assigned by "Care-All" as the consulting actuary for exploring the acquisition opportunities.

i) What are the possible reasons for the "Care-Health" to sell the business? **(4)**

ii) Describe the information you would like to gather to place a value on the target business. **(8)**

iii) Describe how you would value the business of "Care-Health" company. **(4)**

iv) You have observed that as per the published information, assumptions used in Embedded Value calculations of "Care-Health" are very different than best estimate assumptions used by "Care-All" company. Suggest the possible reasons behind the differences between assumptions. **(6)**

v) Before submitting the bid, what other factors are to be considered. **(6)**
[28]

- Q. 4)** A health insurer sells Group Critical Illness cover under compulsory employer-employee group. Under this cover, sum assured is $[200 - (\text{age} + \text{weight})]$ times the monthly basic salary of the employee.

Whereas 'age' and 'weight' are the age and weight of the employees at the time of inception of the policy or at the time of policy renewal. Hence the sum assured would automatically change at each policy renewal.

- i)** Discuss the advantages and disadvantages of introducing the Group Critical Illness cover to this group. (6)
- ii)** Discuss how the company would underwrite this benefit and any potential pitfalls. (8)
- iii)** How would your answer differ from i) and ii) above, if instead of Group Critical Illness cover, Private Medical Insurance cover is offered. (8)
- iv)** What would be the pricing impact if the Group Critical Illness cover is offered on voluntary basis and what additional risks are considered while pricing this plan? (6)

[28]
