

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

14th September 2016

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 inside the cover 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)** A health Insurance Company that is in its 4th year of operation has largely been selling Short term individual Private Medical Insurance (PMI) policies till date.
- i)** The company wants to perform an experience analysis on its portfolio. List down the possible areas of experience analysis and explain the method it should use to analyse each of these areas for PMI. (15)
 - ii)** Due to change in the regulations at the start of its 3rd year of operation, 'Portability' of health insurance policies was made mandatory by the regulator. What are practical challenges for an insurer in offering portability? Also, discuss how this could have impacted the experience of the Insurer? (8)
 - iii)** On performing the analysis, the company realised that it was making high profits on Morbidity experience partly offset by expense experience losses. List down the possible reasons for morbidity profits and expense losses. (8)
 - iv)** The results of the analysis were presented to the CEO and it was discussed how to alter the overall strategy of the Company so as to increase the overall profits going forward. Some of the suggestions that came up were:
 - a)** Provide free health check at the start of 3rd policy year on renewal (4)
 - b)** Recapture the business from the reinsurer (4)
 - c)** Offering group PMI covers to large groups (greater than 1000 members) (4)

Discuss how the components of the experience analysis will be impacted in case of introducing each of the above separately and whether the company is able to achieve its objective of increasing the overall profitability?
 - v)** For the introduction of free health check-up, the company is not intending to increase the premium. Discuss how you would calculate the additional cost of providing this additional benefit under the policy. (5)
 - vi)** For the recapture clause, the company approached the reinsurer who asked for a recapture fee of Rs X. Discuss how will the company validate whether the fee charged is appropriate or not? (5)
 - vii)** For the group PMI, discuss why will the Company choose to offer the policy to large groups only? (5)

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- Q. 2)** The marketing team of a well-established health insurance company primarily selling health indemnity products has come up with a proposal to introduce an inflation index that will reflect the change in overall claim cost every year due to medical inflation. The index will be calculated based on company's own past claims experience.

The team proposes that Sum Insured (SI) of a policy will increase with the corresponding index value at renewal. The increase shall be irrespective of the claim history.

For e.g. an individual buys a policy with SI of INR 100,000 in 2015 and say the index value is 150 for 2015. At renewal in 2016, if the index value is 165, then the sum insured will increase by 10% (165/150).

The premium will be calculated as per the revised sum insured and attained age of the policyholder.

The policyholder will also be entitled for a No Claim Bonus for a claim free year which could be either an increase in SI or a reduction in premium. This is yet to be decided.

The marketing team believes that the index will ensure that the sum insured chosen at inception will always be relevant. Since, such type of index currently doesn't exist in the market, introducing this feature will increase sales for the company.

- i)** Assuming that the insurer decides to launch this product, describe how you would build such an index. (15)
 - ii)** Evaluate all other aspects of the proposal namely Product Design, Pricing, Underwriting & Claims, Sales & Marketing, etc. (22)
 - iii)** Would you recommend the company to launch this product? Please provide arguments in support of your recommendation. (5)
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