

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

13th September 2017

**Subject CA1 – Actuarial Risk Management
(Paper II)**

Time allowed: 3 Hours (14.45* - 18.00 Hours)

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. Attempt all questions, beginning your answer to each question on a separate sheet.*
- 3. *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 3 hours to complete the paper.*
- 4. You must not start writing your answers until instructed to do so by the Supervisor.*
- 5. Mark allocations are shown in brackets.*
- 6. 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)** Compare Quota Share Reinsurance and Surplus Reinsurance [5]
- Q. 2)** i) Why is it not a normal practice to allow surrender of an immediate annuity policy, after the annuity has commenced (4)
- ii) If the insurance company were to allow surrender of such policies, outline the factors it has to consider? (3)
[7]
- Q. 3)** You are a consultant, analyzing the performances of all general insurance companies in the market. On pursuing the annual accounts of a company, you observe that there is a substantial increase in provisions over the last year. What could be the likely reasons for the increase? [9]
- Q. 4)** A company owns a chain of resorts and runs a time share scheme. As per the scheme, public can obtain membership of the scheme by payment of a lump sum. In return the members are allotted fixed holidays every year for a period of 20 years. The members can pre book and avail holidays in any of the resorts. Discuss the insurance needs of the company. [11]
- Q. 5)** In a market, large number life insurance companies sell term insurance policies through both online and off-line channels. The regulator has observed that there is a very high proportion of claim rejection by all companies under the term insurance products, compared to other products.
- i) What could be the reason for such an experience? (3)
- ii) What actions can a company take to ensure that claims rejection rates are reduced? (4)
- The regulator is proposing a new regulation which doesn't allow insurance companies to decline any claim other than those conditions explicitly excluded under the policy or on grounds of fraud (which the insurer has to prove in the court).
- iii) What impact will this new regulation have on the claims experience and claims management process of the insurance companies? (5)
[12]
- Q. 6)** A life insurance company is planning to launch unit linked savings product.
- i) Outline the different types of expenses that would generally be incurred by an insurance company in management of this business (5)
- ii) What factors should be considered while deciding on the charges for this product. (8)
[13]
- Q. 7)** A life insurance company is planning to launch an income protection plan. The features of the plan will be that in return for regular premiums, if the insured is unable to work due to illness, a % of his income will be paid as monthly benefit, as long as the insured is unable to work.
- i) Discuss how underwriting can help in managing the risks associated with this product. (10)
- ii) The insurance company has approached a reinsurance company for quota share

reinsurance of this income protection product. What are the major risks to the reinsurance company in relation to this product? (9)
[19]

- Q. 8)** A Defined benefit pension scheme is in the process of winding up due to employer insolvency. The scheme is currently in surplus. Except for a small proportion of employees who have retired in the recent years, the average age of the active members is about 35 years.
- i)** List the stakeholders for this scheme. (4)
 - ii)** Discuss the choices that the scheme trustees have in managing member benefits and the issues related to each such choice? (12)
 - iii)** The trustees have approached an insurance company to take over the scheme liabilities in return for a single premium. What are the risks to the insurance company from taking over the scheme liabilities? (8)
[24]
