

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

28th May 2012

Subject SA5 – Finance

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) Actuary Land has three Life Insurance companies and all are going through different stages of business growth and are facing different organisational issues . Insurance penetration of Actuary land has improved from 1% to 2 % in couple of years. The three companies are called Mutual Life Insurance Co Ltd (Mutual Life), Small Life Insurance Company Ltd (Small Life) and Medium Life Insurance Company Ltd (Medium Life). All companies are looking for fresh capital to meet various requirements. CEOs, CFOs, local regulator, Consultancies and Investment bankers have met recently and discussed the issues facing the Actuary Land.

With respect to the operations of a life insurance company:

- a) Describe liquidity. Identify specific events that could strain a company's liquidity level. Outline the actions that a company may take to manage a liquidity stress situation. (6)
- b) Contrast the securitization of assets (such as mortgage loans) and the securitization of liabilities (such as insurance policies). (4)
- c) Describe how securitization of assets and liabilities affects the income statement and balance sheet of a life insurance company (4)

Medium Life, which is a listed company on the national stock exchange, has been monitoring its capital position as measured by XYZ – an International rating agency Capital Requirements formula. XYZ has agreed to postpone an immediate rating downgrade if Medium Life can provide a viable plan for improving its capital position within the next nine months.

You have been hired as a consultant to help Medium Life to develop the plan. As a first step, you have decided to provide Medium Life with an extensive list of options to consider, including both internal actions and external marketplace solutions.

- d) Describe the alternatives on your list. (10)

You are the investment actuary for Medium Life. The CEO would like to raise additional capital to improve the rating of the Company. He is considering whether to raise capital through a common stock offering, a public debt offering, or a private bank loan. His biggest concern is the potential impact on the company's stock price that each financing alternative might have.

- e) Explain how "information asymmetry" between management and investors can impact the stock market's reaction to each financing alternative. (5)

You are the CFO for the Small Life, a subsidiary of a large, publicly traded diversified financial services organization operating in several countries. The subsidiary is fairly new and is growing rapidly by expanding into newer products and markets. The CEO of the Small Life has announced that the parent company has been acquired by a competitor. While the acquisition was friendly, the acquirer does not have any interest in life insurance business and wish to sell off the Company.

- f) Assume that the life subsidiary becomes a stand-alone organization. Recommend an appropriate capital structure for the life subsidiary. Support your answer (4)
- g) The CEO invites you to join a partnership of senior executives considering a leveraged buyout (LBO) of the Small Life. State the ways in which an LBO structure might improve the way the Small Life is run. Indicate whether an LBO is appropriate for this situation. Support your answer. (6)

You are the CFO of a Mutual Life. The Company has decided to de-mutualise and accordingly issued shares to the Policyholders. Most of your policyholders have accepted shares at demutualization.

You are developing a dividend policy. Your financial controller believes that no dividends should be paid since this would involve significant frictional costs. Your investment banker suggests that you should pay cash dividends since the company is extremely profitable.

- h) Outline the issues you would need to consider in setting a dividend policy. Suggest a method of returning profits to shareholders other than cash dividends. (4)
- i) The local regulator is drafting final guidelines to be issued for Universal Life products. One of the features being discussed is allowing flexibility on timing, frequency and amount of premium paid for such contracts.
- a) Describe the organizational issues related to asset liability management for this block of flexible premium life insurance policies (4)
- b) Describe the mechanics of a cash flow matching strategy in context of the above product (4)

[51]

- Q. 2)** In a developing country, it has been decided to decontrol the economy by allowing private sector participation in various infrastructure and financial sectors. As part of the decontrolling of economy, the aviation sector has also been allowed for operation of multiple airlines both in domestic and international circuits.

The government whilst decontrolling the economy has anticipated the possibility of mergers and acquisitions in various sectors and has decided to put in place a regulatory authority to oversee an orderly mergers and acquisitions.

The government has decided to appoint a consultant for drafting a report covering the following areas:

- i) The reasons why companies wish to merge
- ii) The key principles to be taken into consideration whilst drafting the regulations for mergers

Briefly discuss the key items pertaining to the above areas the consultant would write in his report (10)

As the aviation market is largely untapped, many companies have forayed into this industry. One of the companies King Airlines Ltd.(KAL) , promoted by a large liquor manufacturing company Beer Ltd with huge cash surpluses has started nationwide domestic services with a motto of “quality service”. The major shareholder in Beer Limited owns 70% of the Beer Ltd’s equity. KAL has a capital structure of debt and equity in the ratio of 2:1. KAL has 50 Air Buses on ownership basis and about 100 Air Buses on lease basis. All the aircrafts are new. The debt holders have an option to convert the debt into equity under certain circumstances such as default etc. The major shareholder has offered a token of his equity stake in Beer Ltd as a guarantee to demonstrate his commitment to this venture.

In order to gain market share, the company has rapidly expanded its services including international services and has incurred losses. Due to intensification of the competition, the company has been forced to cut the ticket prices in order to maintain the market share. In a few years coupled with intense competition and recession, the Company has been experiencing cash flow problems. The lenders , who have already been facing default positions, have shown reluctance to enhance working capital limits

- a) Explain the impact the cash flow problems may have on the company that may be detrimental to its long- term interests (10)
- b) The company has resorted to certain short term measures in order to tide over the cash flow problems. Outline the cash saving measures the Company may undertake which may impact its business in the long term (6)

The Company’s short term measures have not been successful and the Company’s financial position has been deteriorating rapidly.

- c) Briefly outline the options the lenders have in this situation (8)

The main shareholder of the Beer Ltd., has decided to explore the option of selling off the KAL to exit the industry in view of the financial difficulties. The Management of one of the competitor companies, Indi Airlines Ltd (IAL) which has been very successful in the aviation industry has suggested to its board to consider buying out KAL. The Board has asked the management team to prepare a report.

The CEO has asked you to prepare the report covering the following:

- d) The key reasons why the merger would be considered (7)
- e) The issues IAL need to consider while estimating the price that has to be offered to KAL shareholders (8)

[49]
