May, 2013

ACTUARIAL ASPECTS OF PRODUCT DEVELOPMENT

[Time : 3 Hours] Answer ANY FIVE questions only .
Each question carries 20 Marks.

[CFL-92]
Reg. No.

[Total Marks:100]

Q.1 Write short notes on:
   a) Use and File System
   b) Simple Reversionary Bonus and Compound Reversionary Bonus
   c) Guaranteed Surrender Value and Special Surrender Value
   d) Free cover limit in Group Life Insurance Product

Marks
5 each

Q.2 Comment briefly on:
   a) Insurance products are more of push products then pull products.
   b) While pricing the product underestimation of mortality for assurance
      type of products and overestimation of mortality for annuity type of
      products are financial risks to the life insurer.
   c) Underwriting aims at reducing the mortality risk associated with product
      pricing.
   d) A student actuary was heard saying “Increase the margins for adverse
      deviation while pricing the product and the requirement of solvency
      margin can be done away with.” Do you agree?

5 each

Q.3 a) What are the advantages and disadvantages of reinsurance arrangements
      for an insurance company ?
   b) What is a Reinsurance Treaty? Describe its common terms and conditions.

10 each

Q.4 An Appointed Actuary is required to provide information on various aspects
   while filing application for ‘FILE AND USE’ of Non-Linked Insurance
   Products. Enumerate various key points in the application to be made for
   this purpose.

20

Q.5 a) List the reasons why the life insurers make commission payments
      to the life insurance agents.
   b) List the factors usually considered in choosing the commission rates
      payable to agents procuring life insurance business.

10 each

Q.6 a) Define Riders / Add Ons and list their characteristics in context of Life
      Insurance Contract.
   b) Name five riders usually offered with the main contract and explain
      their main features.

10 each
Q.7  a) For a life aged x, write down the formulae in respect of the following contracts, both for single premium and annual premium:  
(i) Whole Life Contract  
(ii) Term Assurance Contract  
(iii) Pure Endowment Contract  
(iv) Endowment Assurance Contract  
(v) Deferred Annuity Contract where annual premium is payable for first ten years  
b) List the stages involved in cash flow method of determination of Life Insurance Premium.

Q.8 List five group insurance contracts usually offered by the life insurers and explain briefly about each of these contracts.

END