M.Sc. ACTUARIAL SCIENCE (MSCAS)

Term-End Examination

June, 2013

MIA-012 (F2F) : ACTUARIAL RICK MANAGEMENT-1

Time : 3 hours   *Maximum Marks : 100*

Note : (i)   *There are **two** sections **A** and **B**. Both are compulsory.*

(ii)   *Internal choices are indicated under each section.*

SECTION-A

There are **7** questions in section '**A**' each carries **8** marks . Attempt **any five** :

1. Discuss the investment and risk characteristic of   **8**
    direct property investment.

2. What is Actuarial Control Cycle (ACC) ? Explain   **8**
    in detail.

3. Describe the four main theories of yield curve.   **8**

4. Describe the following :   **4x2=8**
    (a)   NPV
    (b)   IRR
    (c)   Payback Period
    (d)   Discounted payback period

5. (a) What are the main steps involved in Risk 4
identification ?

(b) What are the ways of mitigating risk ? 4

6. What are the main characteristic of a well run 8
project ?

7. You are intended to design a contract. What are 8
the factors that may be taken into account in
designing a contract ?

SECTION-B

There are **six** questions in section 'B' each of **15** marks. Answer **any four** :

8. An investor is considering selling his nine properties and investing in property shares instead. Discuss the factors that would be considered in reaching a decision.   **15**

9. A French based fashion clothing retailer, which is considering setting up a new internet subsidiary to sell his clothing range into the US Market. Currently it has no distribution outside France. Identify the major risk involved in launching the subsidiary together with the ways that these risks might be mitigated.   **15**

10. Discuss the cashflow of the following products :   **5x3=15**
    (a)   an annuity
    (b)   term assurance
    (c)   endowment assurance
    (d)   an "interest only" loan
    (e)   the repayment loan (or Mortgage)

11. Describe the following in detail :   **15**
    (a)   Liability insurance
    (b)   Property damage insurance
    (c)   Financial loss insurance
    (d)   Fixed benefit insurance

12. (a) What are the methods of valuation for   8
        individual investment ? Explain them
        clearly.

    (b) Show that $V = \dfrac{D}{i-g}$ 4

        Symbol have usual meaning.

    (c) What is relationship between returns on   3
        asset class ? State.

13. (a) State the aim of regulation. What are the   8
        cost involved in regulation ? Explain them.

    (b) List the stake holders whom an actuary   7
        might advice. Also explain the area in
        which an actuary can advice to the listed
        stakeholders.

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