

(Following Paper ID and Roll No. to be filled in your  
Answer Books)

Paper ID : 270422

Roll No.

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**M.B.A.****Theory Examination (Semester-IV) 2015-16****INSURANCE & RISK MANAGEMENT****Time : 3 Hours****Max. Marks : 100****Section-A**

1. Answer the following questions in not more than 30 words each. (2×10=20)

- (a) Differentiate between life and general insurance?
- (b) What is systematic risk?
- (c) What are underwriting guidelines?
- (d) Define value at risk.
- (e) What is the significance of mutual fund in insurance industry?

- (f) What is reinsurance?
- (g) What is law of negligence?
- (h) What are pension funds?
- (i) What is principal of utmost good faith?
- (j) What is an actuary?

### Section-B

2. Answer any five questions from this section.

(10×5=50)

- (a) Explain about the distribution channels in insurance business.
- (b) Explain briefly the role of insurer obligation towards rural and social sector.
- (c) Discuss the meaning and nature of Housing finance.
- (d) Discuss in brief the factors that affect the determination of premiums and bonuses.
- (e) Briefly discuss the important provisions of IRDA Act 1999.

(2)

- (f) Elaborate the steps involved in the preparation of insurance documents.
- (g) Briefly discuss the provisions of Married Women's Property Act 1874.
- (h) Differentiate between term and endowment plans of insurance.

### Section-C

This section will have 3 questions of 15 marks each. The candidates should attempt any two questions of 15 marks each. (15×2=30)

3. An annual premium with profit 20-year endowment assurance policy, issued to a life aged exactly 40 has a basic sum assured of Rs.100,000 payable at the end of the year of death or at maturity. Premiums are calculated assuming AM92 Select mortality, 4% pa interest, initial expenses of Rs.500 and claim related expenses of 3% of the base sum assured (payable on death or maturity)].

Calculate the premium if the policy is assumed to provide simple bonuses of 2% of the sum assured vesting at the end of each policy year (i.e. the basic benefit amount will be increased by Rs.2000 at the end of each policy year for future claim

(3)

4. An individual aged 25 takes a pension policy with a term of 30 years. The policy requires payment of annual premiums in advance for two thirds of the policy term. On death, 10 times the annual premium is paid. On survival to the end of the term, a pension of Rs.12000 per quarter is paid in advance until the death of the policy holder. After vesting of pension no death benefit is paid.

Assumptions :

Mortality before age 55: AM92 ;

Mortality after age 55 : PMA92C20 Interest: 4% p.a Ignore expenses;

Calculate the annual premium under the policy.

5. A two-year term assurance policy is issued to a life aged  $x$ . The benefit amount is Rs.100,000 if the life dies in the first year, and Rs.200,000 if the life dies in the second year. Benefits are payable at the end of the year of death.
- (i) Write down an expression for the present value random variable for this benefit.
- (ii) Calculate the standard deviation of the present value random variable assuming that  $q_x = 0.025$ ,  $q_{x+1} = 0.030$  and  $i = 0.06$ .