MAY 2010

INSURANCE & RISK MANAGEMENT (I&M) EXAMINATION.

Roll No...............................

P-3-Risk Management and Reinsurance

Total No. of Questions—9]

[Total No. of Printed Pages—8

Time Allowed—3 Hours

Maximum Marks—100

ETC

Answer **all** questions.

Marks

1. Select the Right answer : 1×20 =20

(i) When one party to a transaction has relevant information that the other does not have is known as

(a) Asymmetric information

(b) Perfect competition

(c) Moral Hazard

(d) Regulations

(e) None of the above.

(ii) A situation is characterized by uncertainty as to whether loss will occur.

(a) Subjective risk

(b) Fundamental risk

(c) Speculative risk

(d) Pure risk

(e) None of the above.

(iii) Risk Retention is the tool of

(a) Risk finance

(b) Risk control

(c) Risk mitigation

(d) Risk avoidance

(e) None of the above.

(iv) Maximum possible loss is one of the measures of the severity of loss. Maximum possible loss means

(a) "most likely loss"

(b) "worst loss that could occur"

(c) "most unlikely loss"

(d) "all financial losses"

(e) None of the above.

(v) What is the Expected Value if 30 percent earnings on investment of Rs. 20,000 in the mutual fund for the year with a probability of 0.50 or a loss of 15 percent, again with a probability of 0.50.

(a) Rs. 10,750

(b) Rs. 13,000

(c) Rs. 8,500

(d) Rs. 21,500

(e) None of the above.

(vi) The mutual exchanging of reinsurance, often in equal amounts, from one party to another, is called

(a) Reciprocal trading

(b) Quota share treaty

(c) Pro rata treaty

(d) Non-proportional treaty

(e) None of the above.

(vii) Losses below a specified size to the borne by the insured, are called .... provisions.

(a) Quota share

(b) Deductible

(c) Surplus share

(d) Facultative treate

(e) None of the above.

(viii) Mode,

(a) is the mid-point in a set of data

(b) is arithmetic average for a set of data

(c) that occurs most frequently in the frequency distribution

(d) measures how close or distant a group of individual measurements

(e) None of the above.

(ix) .... apply the theory of games of strategy (in contrast to games of chance) to decision making in business and investing.

(a) John von Neumann and Oskar Morgenstern

(b) Bernoulli

(c) Markowitz

(d) Keynes

(e) Kahneman.

(x) The method of entrusting the process of risk management to different functional areas is known as

(a) Integrated risk management

(b) Silo approach

(c) Enterprise risk management

(d) Both (a) and (b)

(e) None of the above.

Marks

(xi) If an underwriter estimates the maximum amount of damage that would probably occur in the event of an accident with reference to the actual sum insured, it is known as

(a) Probable Maximum Loss Underwriting

(b) Maximum Foreseeable Loss Underwriting

(c) Hedging

(d) Numerical rating method Underwriting

(e) None of the above.

(xii) The ratio of actual past losses to their corresponding premium (written or earned) for the same period. This ratio is used in assessing a portfolio of business and in determining rate of premium for renewal. This can be termed as

(a) Cover note

(b) Deductible

(c) Experience rating

(d) Burning cost

(e) Both (c) and (d).

(xiii) Surplus Share Treaty Reinsurance comes under the

(a) Pro-rata category

(b) Non-Pro rata category

(c) Per occurrence of loss category

(d) Both (a) and (c)

(e) None of the above.

(xiv) Per risk excess treaty comes under

(a) Proportional Treaty

(b) Non-Proportional Treaty

(c) Excess of loss treaty

(d) Both (a) and (c)

(e) Both (b) and (c).

Marks

(xv) Retrocession means

(a) The reinsuring of reinsurance

(b) The reinsuring of insurance

(c) The amount of insurance liability

(d) The indemnity aspect of the agreement

(e) None of the above.

(xvi) A reinsurance contract under which the ceding company has the option to cede and the reinsurer has the option to accept or decline individual risks

(a) Facultative treaty

(b) Facultative reinsurance

(c) Follow the fortunes

(d) Reinstatement

(e) None of the above.

(xvii) A form of pro rata reinsurance (proportional) in which the reinsurer assumes an agreed percentage of each insurance being reinsured and shares all premiums and losses accordingly with the reinsured.

(a) Quota share Reinsurance

(b) Facultative reinsurance

(c) Line

(d) Facultative treaty

(e) Excess of loss.

(xviii) Pure captive insurance companies provide coverage to

(a) Multi national companies

(b) Incurred but not reported claims

(c) Single owners who hold the company

(d) Agency insurance companies

(e) None of the above.

Marks

(xix) Munich Re is a Reinsurance company at Domicile of

(a) Italy

(b) Switzerland

(c) Germany

(d) United States

(e) London.

(xx) An incremental commission paid on a retrocession of a reinsurance is known as

(a) Cession

(b) Retrocession

(c) Retention

(d) Over riding commission

(e) Pool.

2. (a) Discuss the characteristics of an imperfectly competitive market with reference to insurance market. 8

(b) Distinguish between subjective and objective risks. 2

3. (a) What is a Risk management matrix ? Give an illustrative matrix. 4

(b) Calculate Mean, Variance, Standard deviation and Coefficient of variation with the given volume of sales 600, 650, 700, 750, 800 ('000s) of 5 days. 6

4. (a) Using expected utility rule, show how the purchase of life insurance by an individual can be justified. 6

(b) Write a brief note on each : 4

(i) Finite risk insurance

(ii) Securitization.

Marks

5. Recently a leading automobile manufacturing company, Toyota, is reported to have recalled some of the automobiles from the customers who have purchased from its dealers : 10

(i) Why have they recalled the vehicles ?

(ii) What are the specific risks that the company is exposed to and which they are trying to obviate ?

6. (a) List out the requirements of a valid reinsurance contract. 5

(b) Explain the meaning of terms in reinsurance : 5

(i) Reserves

(ii) Slip

(iii) Portfolio

(iv) Retention

(v) Over Riding Commission.

7. (a) Bring out the difference between coinsurance and reinsurance. 5

(b) "The proportion of total life insurance premiums reinsured is small is comparison with most of the non-life insurance classes". Why reinsurance of life insurance is not popular ? Trace out reasons and explain the process of reinsurance of life insurance. 5

8. (a) Discuss the clauses of the IRDA (General Insurance-Reinsurance) Regulations, 2000 pertaining to procedures for reinsurance arrangements regarding : 5

(i) The period for filing and submission of reinsurance program of every insurer

(ii) The powers of the authority in this regard.

(b) What is the objective of reinsurance accounting ? In what way is it different from other accounting ? 5

Marks

9. (a) Calculate the profit commission on flat rate at 25% and on sliding scale rate with the given information. Show the difference in profit commission based on flat rate and sliding scale rate. 5

- Profit for the year = Rs. 500
- Premium Income = Rs. 2,000
- Sliding scale rate = 25% on profit equal to 10% of the premiums of the year + 35% on profit equal to next 10% of the premium of the year + 50% on remaining profit.

(b) The Sierra Insurance Company has a gross retention of Rs. 50,00,000 with a 50% of quota share and a 10 line surplus treaty and the balance is facultative the company suffers a loss of Rs. 6,00,00,000. Allocate the loss to the reinsurance. 5