Multiple-Choice Question (All Multiple-Choice Questions carries Two Marks Each)

Q.1 The mean and the variance are the same in
   a) Poisson distribution
   b) Binomial Distribution
   c) Normal Distribution
   d) Exponential Distribution

Q.2 Which of the following could be the most likely reason for the failure of a general insurance company?
   a) Deficient loss reserve
   b) Rapid Growth
   c) Alleged Fraud
   d) Reinsurance Failure

Q.3 Which of the following is generally an investment for general insurance company?
   a) Equity
   b) Government Bonds
   c) Financial Derivatives
   d) Bullion

Q.4 Which of the following is the corrected expanded form of IBNER?
   a) Incurred but not enough reported
   b) Implied but not enough reported
   c) Incurred but not expected reported
   d) Incurred but not either reported

Q.5 Which of the following is not commonly used to model severity?
   a) Gamma Distribution
   b) Log Normal Distribution
   c) Poisson Distribution
   d) None of the above

Q.6 The standard for full credibility is 2000. How much credibility is assigned to 300 claims?
   a) 15%
   b) 17.5%
   c) 38.7%
Q.7 Which of the following ratios measure profitability?
   a) Quick Ratio
   b) Leverage Ratio
   c) Return on Equity
   d) Interest Coverage Ratio

Q.8 The catastrophe loss event severity, in terms of loss ratio, is modeled using a Pareto Distribution with parameters 8% and 3. What is the variance of the catastrophe loss event severity?
   a) 4.000%
   b) 0.064%
   c) 0.480%
   d) 0.240%

Q.9 A surplus reinsurance treaty is used by an insurer in order to:
   a) Reduce risk writing capacity
   b) Fine tune its experience
   c) Increase profitability by recovery
   d) None of these

Q.10 A strategy that eliminates price risk and coupon reinvestment risk on a fixed income portfolio is known as:
   a) Balancing
   b) Immunization
   c) Securitization
   d) None of the above

Q.11 Assume that 14% of students writing the exam are working and 8% of students writing the exam are working and pass their exam. What is the chance of a working student passing his/her exam?
   a) 14%
   b) 100%
   c) 62%
   d) 57%

Q.12 For proportional reinsurance treaties, the commission that depends on the performance of the treaty is:
   a) Return commission
   b) Ceding commission
   c) Overriding commission
   d) Sliding scale commission

Q.13 The claim count $N$ for an individual insured has a Poisson distribution with mean $\lambda$; and $\lambda$ is uniformly distributed between 1 and 3. What is the probability that a randomly selected insured will have no claims?
   a) 0.159
b) 0.179

c) 2.000

d) 0.001

Q.14 Which is not a form of finite reinsurance?
   a) Working layer excess treaty
   b) Loss portfolio transfer
   c) Financial proportional cover
   d) Funded aggregate excess cover

Q.15 The most suitable reinsurance treaty for protecting the account of a Specialist Crop insurer is:
   a) Risk excess of loss
   b) Quota Share
   c) Surplus
   d) Stop loss

(Essay type questions: All essay type questions carry Ten marks each)

Q.16 Describe any three types of reinsurance stating the merits and demerits of each. What are the four major functions of reinsurance for an insurance company? 10

Q.17 a) Explain the term ‘Economic Value’ of an insurance company.
   b) What are the reasons for regulating the insurance industry? State any two possible result if the insurance industry is de-regularized completely.
       4

Q.18 a) Describe the theory behind CAPM that is to be considered while concluding the pricing of insurance products.
   b) Write a short on catastrophe models and its components.
       5

Q.19 Write short notes on
   a) Unearned premium reserve
   b) Insurance Securitization
       5 each

Q.20 Explain the steps in asset liability matching. Discuss the financial & regulatory impact of mismatch between assets and liabilities.

Q.21 Discuss the role of investments in general insurance. Explain different methods for including investment income in rate making?

Q.22 Discuss importance and sources of data available (internal & external) to the insurance industry for performing analysis.

END