# Master in Monetary and Financial Economics 

## Banking and Insurance

Exam - 12 January 2017

Time: 2:00h

> I (10/20)

Tick the most appropriate answer:
(wrong answer $=-0,25 ;$ minimum for question 1. $=0$ )

1) Objective risk is defined as
A) the probability of loss.
B) the relative variation of actual loss from expected loss.
C) uncertainty based on a person's mental condition or state of mind.
D) the cause of loss.
2) An insurance company estimates its objective risk for 10,000 exposures to be 10 percent. Assuming the probability of loss remains the same, what would happen to the objective risk if the number of exposures were to increase to 1 million?
A) It would decrease to 1 percent.
B) It would decrease to 5 percent.
C) It would remain the same.
D) It would increase to 20 percent.
3) Uncertainty based on a person's mental condition or state of mind is known as
A) objective risk.
B) subjective risk.
C) objective probability.
D) subjective probability.
4) The long-run relative frequency of an event based on the assumption of an infinite number of observations with no change in the underlying conditions is called
A) objective probability.
B) objective risk.
C) subjective probability.
D) subjective risk.
5) Which of the following statements about a priori probabilities is correct?
A) They are subjective probabilities based on ambiguity in the way probability is perceived.
B) They are subjective probabilities that may vary among individuals because of factors such as age, gender, education, and the use of alcohol.
C) They are objective probabilities that can be determined by deductive reasoning.
D) They are objective probabilities that can be determined by subjective reasoning.
6) One of the speculative financial risks considered in an enterprise risk management program is the risk of loss because of adverse changes in commodity prices, interest rates, foreign exchange rates, and the value of money. This risk is called
A) property risk.
B) financial risk.
C) strategic risk.
D) operational risk.
7) According to the law of large numbers, what should happen as an insurer increases the number of units insured?
A) The amount the insurer expects to pay in claims should decrease.
B) Underwriting expenses should decrease.
C) Actual results will more closely approach expected results.
D) The insurer's profitability should become more variable.
8) Characteristics of a fortuitous loss include which of the following?
I. The loss is certain to occur.
II. The loss occurs as a result of chance.
A) I only
B) II only
C) both I and II
D) neither I nor II
9) A group of farmers agreed that if any farmer suffered a property loss, the loss would be spread over the entire group. In this way, each farmer is responsible for the average loss of the group rather than the actual loss that each farmer sustained. Which characteristic of insurance is embodied in this agreement?
A) pooling of losses
B) fortuitous losses
C) risk avoidance
D) indemnification
10) XYZ Insurance Company writes coverage for most perils which can damage property. XYZ, however, does not write flood insurance on property located in flood plains. Which requirement of an ideally insurable risk might be violated if XYZ wrote flood insurance on property located in flood plains?
A) There must be a large number of similar exposure units.
B) The loss should not be catastrophic.
C) The chance of loss must be calculable.
D) The losses must be determinable and measurable.
11) Adverse selection occurs
A) when an insurance company loses money on its investments.
B) when insurance purchasers buy insurance but do not have a loss.
C) when catastrophic losses occur as a result of a natural disaster.
D) when applicants with a higher-than-average chance of loss seek insurance at standard rates.
12) Which of the following statements regarding insurance and hedging is true?
A) Both insurance and hedging deal only with pure risks.
B) Insurance reduces objective risk while hedging involves only risk transfer and not risk reduction.
C) Hedging reduces objective risk while insurance involves only risk reduction and not risk transfer.
D) Both insurance and hedging reduce objective risk but do not involve the transfer of risk.
13) The primary function of an actuary is to
A) adjust claims.
B) determine premium rates.
C) negotiate reinsurance treaties.
D) invest insurance company assets.
14) All of the following statements about the settlement of a claim are true EXCEPT A) The insurance policy usually has a provision specifying how a notice of loss is to be made to the insurance company.
B) One step in the investigation of a claim is to determine whether the policy was in force when the loss occurred.
C) The adjustor must file the proof of loss, which is a sworn statement supporting his or her decision regarding a claim.
D) A policy provision may determine how disputes over claim settlements are resolved.
15) Which of the following statements about reinsurance is true?
A) A reinsurer may not purchase reinsurance.
B) The reinsurer is the first insurer that provides claims services to the insured after a loss occurs.
C) The amount of insurance transferred to a reinsurer is called the net retention.
D) The insurer transferring business to a reinsurer is called the ceding company.
16) All of the following are reasons for a primary insurer to use reinsurance EXCEPT
A) to increase the unearned premium reserve.
B) to increase underwriting capacity.
C) to protect against catastrophic losses.
D) to stabilize profits.
17) Which of the following statements about the investments of property and liability insurers is (are) true?
I. Income from investments is important in offsetting any unfavorable underwriting experience.
II. Because premium income is continually being received, the investment objective of liquidity is of little importance.
A) I only
B) II only
C) both I and II
D) neither I nor II
18) Jan is employed by an insurance company. She reviews applications to determine whether her company should insure the applicant. If insurable, Jan assigns the applicant to a rating category based on the applicant's degree of risk. Jan is a(n)
A) underwriter.
B) actuary.
C) loss control engineer.
D) claims adjustor.
19) Which of the following statements is (are) true about life insurance company investments?
I. The majority of life insurance company general account assets are invested in bonds.
II. The majority of life insurance company separate account assets are invested in stocks.
A) I only
B) II only
C) both I and II
D) neither I nor II
20) ABC Insurance Company entered into a reinsurance agreement with $X Y Z$ Reinsurance. Under the contract, XYZ Re has no liability unless ABC's loss ratio exceeds 85 percent for the year. XYZ Re agreed to pay all losses in excess of the 85 percent loss ratio. ABC Insurance Company is using reinsurance to
A) stabilize profits.
B) reduce the unearned premium reserve.
C) provide large risk capacity.
D) retire from a line or territory.

| Question | Option |  |  |  |
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|  | A) | B) | C) | D) |
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Name: $\qquad$

1. Please discuss in which extent were the targets of the Economic and Financial Adjustment Program (2011-2014) in the Banking Sector achieved (2/20)
2. Please take into consideration the following excerpt from the Bank of Portugal's Financial Stability Review (May 2016):
"Despite a reduction in the flow of impairments, high credit at risk volumes continue to hamper the quality of assets and the system's profitability".
2.1. How does the mentioned behaviour on impairments impact on the capital levels of banks? $(1,5 / 20)$
2.2. What are the main indicators to assess the quality of assets referred? $(1,5 / 20)$
2.3. What are the main current constrains on the profitability of Portuguese banks and would could they be overcome? $(2,5 / 20)$
3. "The aggregate financing structure and liquidity position of the Portuguese banking system continued to improve in 2015", Bank of Portugal's Financial Stability Review (May 2016)

Please discuss this assertion, using adequate indicators. (2,5/20)

