

Name: N° Class
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## **Monetary and Financial Economics**

Instituto Superior de Economia e Gestão

### Progress Assessment Test, 12 April 2017, Duration of the test: 45 minutes

- 1. Fill in the response grid on this page, making a cross (X) on the correct answer. In case of error, cross over and put the cross in another box.
- 2. A right answer will be marked +1 point. A wrong answer will be marked -0.2 points.
- 3. Reply only if you think there is a high probability of being the correct answer. If you have many doubts leave it blank.
- 4. It is not allowed to use mobile phones, calculators, or computers. Improper use will lead to cancellation of the test.
- 5. The student may only leave the room after the test has finished.
- 6. The student gives back both the answer page and the questions pages.

Good luck!

### **Answer Grid:**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)
<b>b</b> )	b)																			
c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)
d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)



## 1. What would be the costs for the economy from a decrease in the efficiency of the payment system?

- A. Transactions would be less expensive, the economy would not benefit from specialization.
- B. Transactions would be more expensive, the economy would not benefit from specialization.
- C. The economy would not be affected because transactions would always take place.
- D. None of the previous statements is correct.

### 2. The systemic risk in a sector of activity

- A. Is the opposite of the idiosyncratic risk.
- B. Affects the activity of the sector.
- C. Decreases with portfolio diversification.
- D. None of the previous statements is correct.

## 3. The secondary market

- A. Is the market where securities are traded for the first time.
- B. Is an alternative to the primary market.
- C. Corresponds to the direct financing of borrowers.
- D. None of the previous statements is correct.

## 4. Banks finance the economy

- A. By taking deposits.
- B. By providing credit.
- C. By comparing bonds and other securities in the secondary market.
- D. None of the previous statements is correct.

### 5. Choose the false statement. The leveraging process

- A. Decreases the risk of the investments.
- B. Contributes to increase the possibilities of financing investments.
- C. Contributes to increase the expected rates of return of investments.
- D. It is used by investors in the financial markets.

#### 6. Market risk

- A. Is the opposite of systemic risk.
- B. Increases with portfolio diversification.
- C. Decreases with the leveraging of the portfolio.
- D. None of the previous statements is correct.

## 7. In a portfolio with two risky assets, the opportunity investment set can be illustrated with:

- A. Two lines with a positive slope if the correlation coefficient is -1.
- B. Two lines, one with a negative slope and another with a positive slope if the correlation coefficient is -1.
- C. One line with a negative slope if the correlation coefficient is -1.
- D. Two lines, one with a negative slope and another with a positive slope if the correlation coefficient is +1.



### 8. Which of the following statements is not a hypothesis of the Markowitz model?

- A. Investors are rational and are risk averse.
- B. Securities are infinitely divisible.
- C. Financial markets are efficient.
- D. Investors do not have identical expectations and attribute different probabilities to the rates of return of the securities.

## 9. In a portfolio with two risky assets, it is possible for the risk of the portfolio to be lower than the risk of the asset with the lowest risk when:

- A. The correlation coefficient is 0.
- B. The correlation coefficient is +1.
- C. The correlation coefficient is -1.1.
- D. The covariance is +1.

# 10. Choose the <u>incorrect</u> answer. The efficient frontier is the geometric locus of the opportunity investment set of the portfolios that fulfil the following conditions:

- A. For a given expected rate of return, there are no other portfolios with a lower risk.
- B. For a given level of risk, there are no other portfolios with a higher expected rate of return.
- C. For a given expected rate of return, there are other portfolios with the same risk.
- D. There are no other portfolios with a higher expected rate of return and a lower risk.

## 11. To obtain an optimal portfolio an investor should

- A. Determine the tangency point between the efficient frontier and the lowest indifference curve.
- B. Determine the tangency point between the opportunity investment set and the highest indifference curve.
- C. Determine the tangency point between the minimum variance portfolio and the highest indifference curve.
- D. Determine the tangency point between the efficient frontier and the highest indifference curve.

#### 12. The Capital Market Line

- A. Has a positive slope in the geometric space that considers in the abscissa axis the risk measured by the standard deviation and in the axis of ordinates the expected return of the financial assets.
- B. Is the efficient frontier in a market where there are only risky assets.
- C. Is defined by all the dominated portfolios.
- D. Has a positive slope in the geometric space that considers in the abscissa axis the risk measured by the standard deviation and in the axis of ordinates the covariance of the financial assets.

## 13. In the context of the Capital Market Line

- A. The share of the risk-free asset in the portfolio increases when there is a decrease in the risk of the market portfolio.
- B. The share of the risk-free asset in the portfolio increases when there is an increase in the risk of the market portfolio.
- C. The share of the risk-free asset in the portfolio decreases when there is a decrease in the risk of the risk-free asset.
- D. The share of the risk-free asset in the portfolio increases when the risk of the market portfolio increases more than the increase in the risk of the risk-free asset.



### 14. The interest rate of a bond

- A. Is equal to the rate of return of the bond when the bond is at par.
- B. Is equal to the coupon rate when the bond is at par.
- C. Is equal to the yield to maturity.
- D. B and C.

## 15. The risk premium

- A. Is the difference between the highest interest rate of a bond with higher risk or less liquidity and a bond with less risk and more liquidity.
- B. Increases with the increase of the risk of a bond.
- C. Increases with the maturity of a bond.
- D. A and B.

## 16. The rate of return can be higher than the interest rate of a bond

- A. If the price of the bond increases during the period of investment.
- B. If the price of the bond decreases during the period of investment.
- C. If the interest rate increases during the period of investment.
- D. A and C.
- 17. Consider that the spot interest rate for a 10-year bond is 3% and that the spot interest rate for a 5-year bond is 2%. Since the liquidity premium for 5-year bonds is 1%, we can conclude that the expected interest rate for 5-year bonds, 5 years from now is:
- A. 2%
- B. 2,5%
- C. 3%
- D. None of the above.

#### 18. Expectations regarding the increase in the inflation rate will generate in present

- A. An increase in bond demand and the increase in the price of bonds.
- B. A decrease in bond demand and the decrease in the price of bonds.
- C. A decrease in the demand of other financial assets.
- D. None of the above.
- 19. If the dividends of firm X increase at an average rate of 4% in the next years and if the last dividend was 3 monetary units per stock, compute the market price of the stock of firm X, assuming that the requested rate of return for the investment is 6%.
- A. 146
- B. 150
- C. 156
- D. Not enough information available.

### 20. The following is evidence against the rational expectations hypothesis:

- A. Prices follow a random walk.
- B. The January effect.
- C. The fact that portfolios suggested by financial analysts, on average, do not provide rates of return higher than the market rate of return.
- D. None of the above.