Name: $\qquad$ $\mathrm{N}^{\mathrm{o}}$ $\qquad$ Class $\qquad$

## Monetary and Financial Economics

Instituto Superior de Economia e Gestão

## Progress Assessment Test, 5 April 2016, 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) |
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| c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) | c) |
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1. In a portfolio with two risky assets, the opportunity investment set can be represented by:
A. Two lines with positive slope when the correlation coefficient is -1 .
B. Two lines, one with null slope and one with positive slope if the correlation coefficient is -1 .
C. A hyperbole if the correlation coefficient is -1 .
D. Two lines, one with negative slope and one with positive slope when the correlation coefficient is -1 .
2. Having present Tobin's Separation Theorem a portfolio of assets can have a return higher than the one of the market portfolio if:
A) The investor is indebted in the free risk asset.
B) There is a long position in the free risk asset.
C) There is short position in the risky asset.
D) There is a negative position in the risky asset.
3. Consider the following Efficient Frontier for two assets in an economy. Which of the following asset is in the Efficient Frontier?

$$
\sigma_{p}^{2}=25 \bar{R}_{p}^{2}-4,875 \bar{R}_{p}+0,2475\left(\bar{R}_{p} \geq 9,75 \%\right)
$$

A. Expected return, 0.15, standard deviation, 0.10.
B. Expected return, 0.10, standard deviation, 0.12.
C. Expected return, 0.12, standard deviation, 0.15.
D. Expected return, 0.08, standard deviation, 0.10.
4. The risk of the market portfolio
A. Is the opposite of the systemic risk.
B. Increases with portfolio diversification.
C. Decreases with the leveraging of the portfolio.
D. None of the above is correct.
5. In a portfolio with two assets, one of them without risk, it is possible that the expected return of the portfolio is higher than the expected return of the asset with higher return when:
A. There is borrowing at the interest rate of the risk-free asset.
B. There is borrowing at the interest rate of the risky asset.
C. There is borrowing at the interest rate of the risky asset and at the interest rate of the risk-free asset.
D. There is no borrowing at the interest rate of the risk-free asset.
6. Which of the following hypothesis is assumed in the context of the Markowitz model?
A. Assets are not infinitely divisible.
B. Investors are rational, and are risk lovers.
C. Investors have identical expectations and give the same probability to the expected rate of return of the assets.
D. Taxes or transaction costs are considered.

## 7. 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 ordinate axis the expected returns of the financial assets.
B. It is the Efficient Frontier in a market where only risky assets are traded.
C. It is the set of all 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 ordinate axis the risk of the market portfolio.
8. When bond supply is higher than bond demand:
A. The interest rate is higher that the equilibrium interest rate.
B. The interest rate is lower than the equilibrium interest rate.
C. The price is lower than the equilibrium price.
D. None of the above is correct.
9. Factors that affect the curve of bond supply:
A. Return on investments.
B. Expectations of inflation.
C. Government budget balance.
D. All the above.
10. If there is an increase in the liquidity of stocks and there is a decrease in the risk of bonds, what will happen to the demand of bonds?
A. Bond demand increases.
B. Bond demand decreases.
C. This information is not sufficient to know what will happen to bond demand.
D. None of the above is correct.
11. Which is the wrong statement?
A. Only for bonds with maturity equal to the holding period of the bond in the portfolio is the rate of return equal to the initial interest rate.
B. Bonds with an initial high interest rate always have a positive rate of return.
C. The longer the maturity the higher the percentage change in the price associated with a given change in the interest rate.
D. Bond prices and returns are more volatile for long term bonds.
12. What is the approximate price of a bond with a face value of $400 €$, coupon rate $\mathbf{o f} \mathbf{1 0 \%}$ and one year maturity, when the interest rate is $2 \%$ ?
A. $431 €$.
B. $392 €$.
C. $423 €$.
D. $400 €$.
13. If there are expectations for rising interest rates and liquidity premium are positive
A. The yield curve is upward slopping.
B. The yield curve is upward slopping according to the liquidity premium theory.
C. The yield curve is horizontal according to expectations theory.
D. All of the above are correct.
14. Usually interest rates increase in the upward part of the business cycle because
A. Bond supply and bond demand increase but supply increases more than demand.
B. Bond supply and bond demand increase but demand increases more than supply.
C. Bond supply and bond demand increase but in the same proportion.
D. Bond supply and bond demand decrease.
15. In the one-period valuation model, the price of a stock depends on:
A. The maturity.
B. The growth rate of dividends.
C. The face value.
D. None of the above is correct.

## 16. The dividends paid to share holders

A. Are determined at the time of issuance.
B. Depend on buying price.
C. Are of an uncertain amount.
D. Are paid every year.

## 17. Financial intermediaries

A. Increase asymmetric information problems.
B. Do not make investments in capital markets.
C. Are responsible for direct financing.
D. None of the above is correct.

## 18. The primary market

A. Allows the adjustment of portfolios.
B. Is an alternative to the secondary market.
C. Is where securities are resold after their issuance.
D. Allows direct financing.

## 19. Banks finance the economy

A. Via the purchase of securities in the secondary market.
B. Via the creation of deposits.
C. Via the over-the-counter market.
D. None of the above is correct.
20. Which statement better describes money as a medium of exchange?
A. Money guarantees immediately the double coincidence of wants.
B. Money requires at least two transactions to attain the double coincidence of wants.
C. Money only occasionally guarantees the double coincidence of wants.
D. None of the above is correct.

