

ALL THE ANSWERS MUST BE JUSTIFIED

DNI number _____ 1st Surname _____ Name _____

1. [15%] Define at least five of the following concepts.

Real GDP

GDP deflator

Flow variable

M2

Money multiplier process

Liquidity of a financial asset

Open market operation

Fisher equation

Purchasing power parity exchange rate

Devaluation

2. [4%] Find net exports (NX) if $S = 50$, $I = 10$, $G = 20$, $TR = 5$, and $T = 30$.

3. [4%] Find the approximate value of nominal GDP growth if the GDP deflator inflation rate is 5% and real GDP growth is -5%.

4. [4%] The nominal interest rate is 10% and the price of a T-bill is 200. Find the face value of the T-bill.

5. [6%] Find the money multiplier if the liquidity ratio is 0.1, the monetary base is 550, and E (currency held by the public) is 100.

6. [2%] Find the real interest rate if the nominal interest rate is 5% and the CPI is 200.

7. [25% | 15%] (i) The government has established a new tax on financial assets according to which the owner of a financial asset must annually pay to the government a 10% of the current price of the asset. Explain if the equilibrium nominal interest rate is likely to rise or fall. Illustrate your explanation by means of a graphical representation of the domestic loan market.
(ii) The central bank wishes to offset the change of the interest rate determined in (i). Indicate three measures by the central bank that can neutralize that change and indicate the effect of one of these measures in a graphical representation of the loan market.

8. [0% | 15%] (i) Explain if the euro appreciates or depreciates with respect to the dollar if the US real GDP rises. Illustrate your explanation by means of a graphical representation of the currency market.
- (ii) Address the same two questions (explain and illustrate) if the European Central Bank executes an expansionary open market operation.
- (iii) Address the same two questions if the events in (i) and (ii) occur simultaneously.