Introduction to Macroeconomics - 31 May 2011

1ST SURNAME

2ND SURNAME

NAME

ID NUMBER

1. (1.5 points) Explain briefly the meaning of the following concepts.

GDP deflator

Monetary policy

Quantity equation

Macroeconomic equilibrium

Real interest rate

2. (1 point) (i) Explain, and represent graphically, what kind of currency market intervention by the Federal Reserve would cause an appreciation of the euro against the dollar. (ii) Would that intervention also cause an appreciation of the euro if it were carried out by the European Central Bank?

3. (1 point) (i) Compute the real exchange rate and the purchasing power parity exchange rate if the nominal exchange rate in the currency market is e = 1/4 €/$, the US CPI is P^* = 800, and the eurozone CPI is P = 400 (specify the units of the two rates computed). (ii) If the purchasing power parity exchange rate differs from the nominal exchange rate in the currency market, explain if the euro is overvalued or undervalued with respect to the dollar and calculate the overvaluation or undervaluation percentage.

4. (1 point) Find out how each of the following events is likely to alter the macroeconomic equilibrium in the AS-AD model.
[Write "↑" if there is an increase or a shift to the right; "↓" if there is a fall or a shift to the left; and "=" if there is no change.]

Event	AS	AD	π	Y
Taxes paid by firms are cut				
The government expenditure is reduced				
The cost to firms of dismissing workers goes up				
Oil prices rise and the central bank applies a monetary policy intended to keep the inflation rate constant				
The government transfers fall and, simultaneously, taxes are cut				

5. (1.5 points) The monetary base is 37,000 €, bank reserves amount to 12,000 €, and the liquidity ratio is 1/10.

a) Calculate (to two decimal places only) the currency held by the public, the money stock M1, the deposits, the reserve ratio, and the money multiplier.

b) If the central bank makes a 1000 € purchase of government bonds, find the monetary base and the money stock.

c) Ignoring b), suppose that the aim is to increase the money stock by 10%. Which change in the reserve ratio would accomplish that goal?