

1ST SURNAME

2ND SURNAME

NAME

ID NUMBER

1. [1.5 points] Explain briefly the meaning of the following concepts.

**Deflation**

**Monetary policy tool (or instrument)**

**Financial asset**

**Macroeconomic equilibrium**

**Real interest rate**

**Okun's law**

**2. [1.5 points]** Explain, and represent graphically: (a) the kind of currency market intervention by the ECB that would cause a depreciation of the euro against the dollar;

(b) the effect on the exchange rate  $\$/\epsilon$  of an increase in the eurozone inflation rate; and

(c) the effect on the exchange rate  $\$/\epsilon$  of a recession in the eurozone.

**3. [1 point]** (a) One of the main banks in an economy has gone bankrupt. Using the loan market model, show the effect of that event on the equilibrium interest rate and the volume of loans.

(b) State two instruments that the central bank could use to neutralize the effect on the interest rate found in (a) and indicate how they should be modified to achieve that goal.

**4. [1 point]** Find out how each of the following events is likely to alter the macroeconomic equilibrium in the AS-AD model. Indicate in each if the event is a policy measure and, if so, whether it is expansionary or contractionary. [Write “↑” if there is an increase; “↓” if a reduction; “=” if there is no change; “→” if there is a shift to the right; “←” if it is to the left ; and “?” if the effect is uncertain.]

Event	AS function	AD function	$\pi$	$Y$	Policy (monetary, fiscal, supply, no policy)	E = expansionary C= contractionary
Social security contributions paid by businessmen are reduced						
The US real GDP grows						
The central bank monetizes the government debt						
Oil prices shoot up (rocket)						
Expectations on the evolution of the economy turn depressed						
VAT (value added tax) puts up						

**5. [1 point]** The monetary base is 100,000 €, the money stock is 300,000 €, and the currency held by the public is 50,000 €. (a) Calculate M1, the reserve ratio, and the money multiplier.

(b) If the central bank makes a 1,000 € 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 100%. Which change in the reserve ratio would accomplish that goal?