Introduction to Macroeconomics · Final exam · 20 June 2018

DNI Number ______________________ Surnames____ Name __________________________

WRITE YOUR ANSWERS TO QUESTIONS 1 TO 20 IN THE TABLE BELOW

Questions 1 to 20 **[20%]**: correct answer, +1%; incorrent answer, –1%; no answer, –0.25%.

Write 'T' if you consider the sentence true and write 'F' if you consider the sentence false																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

1. No rise in the reserve ratio can offset the effect on the money multiplier of a fall in the liquidity ratio.

2. Either the government deficit increases and the trade deficit falls or the government surplus falls and the trade surplus increases: there are no more possibilities.

3. All demand-side policies are chosen by the central bank, except when the government conducts a contractionary open market operation or private banks conduct an expansionary open market operation.

4. Revaluation means that the government raises the interest rate, in general to lower the unemployment rate.

5. The crowding out effect can be neutralized by means of a contractionary monetary policy.

6. The real exchange rate necessarily changes when the nominal interest rate goes up and the inflation rate does down.

7. The devaluation of a fixed exchange rate lowers aggregate demand because every devaluation reduces exports.

8. Either nominal GDP increases or real GDP decreases when the GDP deflator falls.

9. It is always the case that a nominal appreciation causes a real appreciation.

10. According to the liquidity market model, it is uncertain the effect on the interest rate of a contractionary open market operation executed when the government issues T-bills.

11. The Fisher equation states that a rise in the interest rate combined with a reduction in the unemployment rate causes a fall in the exchange rate.

12. It is not true that an increase in the nominal exchange rate, expressed in \$/€ units, represents a reduction in the amount of euros that a dollar can buy.

13. The next variables have all in common not being an economic policy instrument: purchasing power parity exchange rate, unemployment rate, real interest rate, nominal interest rate set by a central bank, tax rate.

14. The difference between financial assets and monetary aggregates is that financial assets are created by firms and households, whereas each component of every monetary aggregate is created by central banks.

15. Excepting reserves, all the components in **M0** and **M1** are forms of money that private banks create.

16. The basic economic policy recommendation that Goodhart's law makes to lower a trade deficit is to cut public expenditure.

17. An implication of the quantity equation is that it is not possible for nominal GDP to grow when the velocity of circulation of money declines.

18. To cause a reduction in the nominal interest rate is a characteristic effect of a contractionary fiscal policy, according to the aggregate supply and aggregate demand model.

19. Okun's law asserts one of the following two predictions: (i) that an increase in the inflation rate eventually leads to a rise in the nominal interest rate; or (ii) that a rise in the unemployment rate produces, in the short run, a GDP expansion.

20. Fiscal policy is the kind of policy that, according to the purchasing power parity theory, makes the money creation process possible.

21. [5%] What is the name for…

… the inverse relationship between unemployment rate and inflation rate?	
… the concept defined in terms of the nominal exchange rate, domestic CPI and foreign CPI?	
… the rate of change of a general price index?	
… the difference between nominal interest rate and inflation rate?	
… the difference between **M1** and cash in the hands of the public?	
… the inverse of the ratio real GDP / nominal GDP?	
… the sale of financial assets by a central bank?	
… the fact that the inflation rate becomes negative, at least for a time?	
… a rise in the inflation rate when GDP falls?	
… the ratio between cash in the hands of the public and deposits?	

22. [3,5%] Identify the five basic components of aggregate demand and explain, for each component, if increasing or reducing it causes a fall in GDP in the aggregate supply and aggregate demand model.	
23. [2,5%] Why in the currency market where dollars are exchanged for euros the demand for euros is equivalent to the supply of dollars?	
24. [9%] Consider president Trump's tweet on the right. Explain with the help of the aggregate supply, aggregate demand model whether raising taxes and increase regulations have a negative impact on GDP and employment.	**Donald J. Trump** @realDonaldTrump U.S.A. Jobs numbers are the BEST in 44 years. If my opponent (the Democrats) had won the election, they would have raised taxes substantially and increased regulations - the economy, and jobs, would have been a disaster! 13:45 - 15 Jun 2018
25. [10%] Consider president Trump's tweet on the right. (i) Explain if it is harmful for a country running for decades a sizeable trade deficit. (ii) Explain how an increase in US tariffs by the Trump administration would affect the US trade deficit. What if the rest of the world also raised tariffs?	**Donald J. Trump** @realDonaldTrump Why should I, as President of the United States, allow countries to continue to make Massive Trade Surpluses, as they have for decades, while our Farmers, Workers & Taxpayers have such a big and unfair price to pay? Not fair to the PEOPLE of America! $800 Billion Trade Deficit... 3:17 - 11 jun. 2018
26. [6%] Consider president Trump's tweet on the right. Explain in what sense high oil prices are not good (if you do not believe that high oil prices are not good, explain why).	**Donald J. Trump** @realDonaldTrump Oil prices are too high, OPEC is at it again. Not good! 13:52 - 13 Jun 2018

27. [17%] There are two periods, 1 and 2. In 1, M1 is 500. The monetary base is 100. Reserves are 50. In 2, M1, the monetary base and reserves double their values from period 1. In each period, the velocity of circulation of money duplicates the money multiplier. In period 1, the nominal interest rate is 1%, the inflation rate is 2% and the unemployment rate is 3%. In period 2, the nominal interest rate is 3%, the unemployment rate is 2% and the inflation rate is 1%. <u>Before any calculation, write the formulae or definitions that justify the calculations</u>.

(i) For each period, calculate the money multiplier, deposits, cash in the hands of the public, and the liquidity and the reserve ratios.

(ii) For each period, calculate nominal GDP, real GDP and the rate of change of the money stock.

(iii) If, during period 1, foreign CPI and the nominal exchange rate do not change, explain whether the real exchange rate increases, decreases, remains constant or there is insufficient information to ascertain it.

(iv) Given the information in part (iii), explain if the purchasing power parity exchange rate goes up or down.

(v) Explain if what happens during periods 1 and 2 contradicts the Phillips curve.

(vi) Explain if what happens during periods 1 and 2 contradicts the Fisher effect.

28. [3%] Explain something that the interest and exchange rates have in common and something that differentiates them. Explain if a rise in the interest rate tends to lower or raise the exchange rate.

29. [9%] Economies A and B have the same currency.

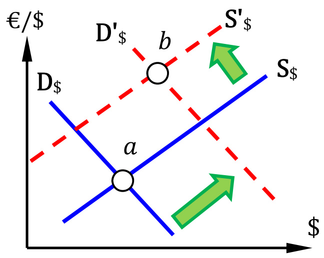
(i) Use a graphical representation of the liquidity market model to find, and explain, the effect on the interest rates in A and B of the following: an expansionary open market operation is conducted in A, which is followed by capital flight from A to B (this capital flight takes initially the form of a sale of financial assets in A and next consists of a purchase of financial assets in B).

(ii) Explain whether an expansionary or a contractionary open market operation would be required in B to make the interest rate in B equal to the interest rate in A, taking into account the events described in part (i).

30. [9%] (i) Explain which market is represented in the figure on the right.

(ii) Explain if, in the passage from *a* to *b*, the euro appreciates or depreciates.

(iii) Suggest an event that could justify the transition from *a* to *b* and explain why the event shifts the two functions as shown.



31. [9%] Consider economies A and B.

(i) Explain which economy has a larger GDP if A's governement conducts an expansionary fiscal policy and B's conducts a contractionary fiscal policy.

(ii) Use a graphical representation of the aggregate supply and aggregate demand model to show the effect on A's macroeconomic equilibrium of the fact that economy B becomes part of economy A. Explain the changes that the integration of B in A would cause in A's aggregate supply and aggregate demand functions.