

Middle East Technical University
Faculty of Economics and Administrative Sciences
Department of Economics
Econ 102 – Introduction to Economics II
Ege, Şenses, Tunç

NAME:
DEPARTMENT:
SECTION:

8 June 2012

TYPE A
FINAL EXAM
(Time Allowed: 140 minutes)

PART I. Answer **ALL** of the following questions. Show all of your calculations. **(60 points)**

1. (6 points) Under which conditions an inflationary gap would lead to accelerating inflation?
How would this accelerating inflation be eliminated?

2. (11 points) Turland is a small economy and its currency is TL. Foreign currency is \$. The following current account data belongs to Turland:

Merchandise exports = \$ 75
Merchandise imports = \$ 100
Exports of services = \$ 30
Imports of services = \$ 25
Income received on investments abroad = \$ 20
Income payments on foreigners' investments in Turland = \$ 25

Show all of your calculations in answering the following questions.

2.1. (3 pts) The trade balance of Turland is _____ \$, the capital-service account balance (net factor income from abroad) of Turland is _____ \$ and the current account balance of Turland is _____ \$.

2.2. (8 pts) Examine the following cases (a to d) and for each case tell whether that case leads to a receipt of foreign exchange or a payment of foreign exchange for Turland, which account of the balance of payments (ie. current account, capital account, official settlements account) of Turland is affected, and in which direction the domestic currency changes (ie. domestic currency appreciates or depreciates)?

- not valid
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ft. =
- a. There is an increase in the number and expenditures of foreign tourists coming to Turland.
 - b. There is an increase in the amount of Turland's physical investment in foreign countries.
 - c. There is an increase in the amount of repatriation of profits (ie. profits transferred home) on Turland investment in foreign countries.
 - d. There is an increase in the amount of Turland government securities bought by foreigners.

3. (10 points) Fixland is a small economy under a fixed exchange rate regime and its currency is FL. The foreign currency is \$.

3.1. (6 pts) The current account balance of Fixland is -30 \$ and the official financing account balance is +20 \$. Then the (combined) balance on the capital and current accounts is

_____ \$, the capital account balance is _____ \$, thus the Central Bank must
_____ (buy/sell) _____ \$ so that the reserves of the Central bank will
_____ (rise/fall) by _____ \$.

3.2. (4 pts) In order to keep the fixed exchange rate, what will the Central Bank have to do (i.e. buy or sell foreign exchange) as a consequence of the following events. Explain and show each case by drawing a graph.

a. There is an increase in the amount of foreign investment in Fixland.

b. There is an increase in the amount of repatriation of profits (ie. foreigners' profits earned in Fixland and transferred home) on foreign investment in Fixland.

4. (14 points) Homeland is a small economy at full employment equilibrium and its currency is HL. The following data belongs to the money market of Homeland:

Required reserve ratio = $r = 20\%$

Currency in circulation = $CUR = 30$

Currency drain = 0

Excess reserve ratio = 0

Deposits in commercial banks = $D = 100$

Securities at the Central Bank = $SEC = 50$

4.1. (1 pt) The amount of the money supply in Homeland is _____ HL.

4.2. (6 pts) Now suppose that Homeland receives a negative supply shock due to rise in wages arising from expectations and enters stagflation. In case of no government or Central Bank intervention, compare what would happen in the labor market in case of flexible and inflexible (sticky) wages. Starting from the initial equilibrium, explain and show the effect of this supply shock on the goods market (AD-AS model) and the labor market and the following adjustment (if any) in the goods market and labor market by drawing graphs.

If wages are flexible:

Goods market

Labor market

If wages are inflexible (sticky):

Goods market

Labor market

4.3. (6 pts) If unemployment persists and the Central Bank buys 10 TL worth of government securities to eliminate this unemployment, show the balance sheet of the Central Bank and the aggregated balance sheet of all the commercial banks in Homeland at the end of the money creation process. (Return to the beginning of question 4 and consider the data about Homeland in answering this question.)

4.4.(1 pt) The money supply in Homeland now becomes _____ HL.

5. (10 points) Compare the consequences (effects) of using expansionary monetary policy in a country under a flexible exchange rate regime and a country under a fixed exchange rate regime.

6. (9 points) Marland is an open economy using currency ML. Marland has a potential output (Y^*) of 1000 ML, but at present, Marland is at an inflationary gap with output, $Y=1200$ ML.

The government calculates that in order to reach potential output, it must either reduce government expenditures by 80 ML or increase net taxes by 100 ML. This means that in Marland government purchases multiplier, $K_G =$ _____, marginal propensity to spend is _____, the tax multiplier, $K_T =$ _____, the marginal propensity to consume out of disposable income is _____, marginal propensity to save out of disposable income is _____, and the balanced budget multiplier, $K_{BB} =$ _____. Additionally, if the marginal propensity to import, $m=0.12$ in Marland, then the marginal tax rate is _____. If Marland government wishes to implement a balanced budget policy, then it must (increase/decrease) _____ government expenditures and net taxes by _____ ML.

PART II. Multiple Choice Questions (20x2=40 points)

In solving questions 1-3, refer to the following Table, which shows how much cocoa or cotton can be produced with one unit of resource in Egypt and Ghana.

	Cotton (bales)	Cocoa Beans (bushels)
Egypt	2	4
Ghana	1	6

- Then opportunity cost of a bale of cotton in Egypt is
 - $\frac{1}{2}$ bushel of cocoa beans.
 - $\frac{2}{3}$ bushel of cocoa beans.
 - $\frac{1}{6}$ bushel of cocoa beans.
 - 2 bushels of cocoa beans.
 - 4 bushels of cocoa beans.
- In comparison with Egypt, Ghana has
 - an absolute advantage in the production of cotton.
 - an absolute, but not a comparative advantage in the production of cocoa beans.
 - a comparative advantage in the production of cotton.
 - an absolute and comparative advantage in the production of cocoa beans.
 - an absolute and comparative advantage in the production of cotton.
- If one unit of resources is shifted from cotton to cocoa beans in Ghana, and one unit of resources is shifted from cocoa beans to cotton in Egypt, world output would increase by
 - 2 bales of cotton.
 - 1 bale of cotton and 2 bushels of cocoa beans.
 - 2 bales of cotton and 1 bushel of cocoa beans.
 - 6 bushels of cocoa beans.
 - 3 bales of cotton and 10 bushels of cocoa beans.
- A demand shock will cause the price level and the unemployment rate to move in _____ direction(s). A supply shock will cause the price level and the unemployment rate to move in _____ directions.
 - opposite; opposite
 - opposite; the same
 - the same; opposite
 - the same; the same
 - Not enough information is given to answer the question.
- Which of the following determines among others the quantity demanded for money?
 - The required reserve ratio
 - The price level
 - The money multiplier
 - The policies of the Treasury

$\Rightarrow$ not included in the exam

6. If the change in business inventories is zero, then final sales are
- zero.
 - less than GDP.
 - greater than GDP.
 - equal to GDP
7. Which of the following statements is true about fiscal policy in the short run?
- An increase in government spending would have a larger positive impact on GDP when the crowding-out effect is stronger.
 - The government spending multiplier goes up as the marginal propensity to save increases.
 - The government spending multiplier goes up as the marginal propensity to consume increases.
 - An increase in taxes has the same effect on the economy as an equal increase in spending.
 - An increase in government spending would have a smaller positive impact on GDP when the crowding-out effect is weaker.
8. Which of the following statements about money is incorrect?
- Money is a medium of exchange.
 - Money is the most liquid store of value.
 - Money is both income and wealth.
 - Money is a unit of account.
9. Suppose the current unemployment rate is at the natural rate of unemployment. Which of the following is correct?
- The current unemployment rate is zero.
 - Frictional and structural unemployment equal zero.
 - Cyclical unemployment equals zero.
 - The actual unemployment rate can never equal the natural rate of unemployment rate because the latter is simply a theoretical concept.
10. A sudden increase in the price of oil causes a _____ inflation and _____ output.
- demand pull; lower
 - cost-push; higher
 - demand-pull; higher
 - cost-push; lower
11. If the interest rate is so high that it is adversely (negatively) affecting economic growth, the recommended policy action should be
- an expansionary fiscal policy.
 - an expansionary monetary policy.
 - a contractionary monetary policy.
 - increasing the demand for money.

12. Monetary policy can be effective only if
- the money supply reacts to changes in the interest rate.
 - planned investment reacts to changes in the interest rate.
 - there is inflation targeting.
 - government spending reacts to changes in the interest rate.
13. The economic impact of automatic stabilizers during recessionary periods is to
- increase unemployment.
 - increase taxes.
 - increase government spending.
 - increase money growth.
14. Which of the following events will lead to an increase in the equilibrium interest rate?
- A decrease in the level of aggregate output.
 - A decrease in the discount rate.
 - An increase in the price level.
 - A purchase of government securities by the Central Bank.
15. Zeynep wants to borrow 100TL from Ahmet. Ahmet wants to make 6% real return on his money, so they both agree on a 6% interest rate to be paid next year. Both don't anticipate the -2% inflation next year. In this case,
- Zeynep will pay an 8% real interest rate.
 - Ahmet is better off.
 - Zeynep will pay a 6% nominal interest rate.
 - All of the above are correct.
16. A shortage in the money market can be eliminated through
- a decrease in the price level.
 - an increase in the money supply.
 - a decrease in GDP.
 - All of the above.
17. If 2002 is the base year and the inflation rate between 2002 and 2003 is 4%, the price index in 2003 is
- 40.
 - 104.
 - 140.
 - Cannot be determined from this information.
18. Which of the following would not be counted in 2003's GDP?
- The value of a 2001 car you purchase from a car dealer in 2003.
 - The 2003 salary of a used car salesperson.
 - The commissions earned by a real estate agent in selling houses built prior to 2003.
 - The value of a computer manufactured in 2003 but not sold in 2003.

19. If the LRAS curve is continually shifting to the right, it is probably safe to assume that _____ is increasing.

- a. population
- b. the capital stock
- c. labor productivity
- d. technological progress
- e. any of the above

20. If nominal GDP is \$12 trillion and real GDP is \$3 trillion, then the GDP deflator is

- a. 0.4
- b. 15
- c. 9
- d. 36
- e. 400