

Surname: _____

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UNIVERSITÉ
DE GENÈVE

FACULTÉ DES SCIENCES
ÉCONOMIQUES ET SOCIALES

FINAL EXAM

INTRODUCTION TO MACROECONOMICS

Course by Salvatore di Falco, 2012-2013

May 28, 2013

Total number of pages: **11 pages + answer sheet**

Working time: 120 minutes (30 questions)

Allowed aids: none (calculators are not allowed).

Please read the following instructions carefully

- ★ Please place your student card on your desk. This will facilitate the identity control.
- ★ Write your Surname(s), Name(s) et Student number (8 digits without hyphens) on this sheet **and** on the answer sheet.
- ★ **All pages have to be handed in at the end of the exam.**
- ★ On the answer sheet put a cross inside the box that corresponds to your answer (a to d) or fill in the box. Use blue or black ink.
- ★ Corrections, if necessary, have to be made carefully. The right answer must be clearly identifiable and unique. If this is not the case the answer will be considered false.
- ★ No questions will be answered during the exam.

Example:

	Correct				Wrong				
	A	B	C	D	A	B	C	D	
Q1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Q16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Q17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Q3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Q18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Q4	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Q19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Q5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Q20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Don't waste your chances by leaving questions unanswered.

There are no negative points and there is only one correct answer to each question.

ATTENTION:

If not indicated otherwise, demand and supply curves have the usual shape.

Question 1

Which of the following statements are correct ?

- I. GDP and the wealth of a person are stock variables.
 - II. According to monetarists monetary policy is inefficient if it is not anticipated.
 - III. A correlation between two variables, say x and y , always implies that there is a causal relation between those two. The goal of an economist is to put forward hypotheses about this causal link and to test them using available data.
 - IV. In an economic model endogenous variables are explained by exogenous variables.
- (a) Only IV is correct.
 - (b) Only I is false.
 - (c) II and III are correct and the rest is false.
 - (d) II and IV are correct and the rest is false.

Answer (a)

Question 2

Choose the right answer :

- (a) Analyzing how changes in sugar prices affect demand for sugar falls into the domain of macroeconomics.
- (b) Imagine you are the minister of finance. If you would like to know the effects of an increase in consumption on unemployment, you would call a macroeconomist.
- (c) Macroeconomics analyses how firms employ factors of production to maximize profits.
- (d) Imagine you are the minister of finance. If you wanted to know, how an individual's supply of labour changes after a wage raise, you would call a macroeconomist.

Answer(b)

Question 3

Which of the following statements is **false**? GDP per capita has a tendency to :

- (a) decrease if leisure time increases.
- (b) overstate the value of goods and services produced in an economy because of e.g. unpaid volunteering work.
- (c) understate the value of goods and services produced in an economy because of the existence of a black market.
- (d) overstate welfare because of the existence of negative environmental externalities.

Answer (b)

Question 4

In year 2000 the real GDP of country was 300 with respect to the reference year, whereas the nominal GDP was 450. Which of the following statements is correct ?

- (a) The difference between the real and nominal GDP quantifies the effect of prices on production in 2000.
- (b) The reference year chosen for the calculation of real GDP must be before 2000.
- (c) The GDP deflator in 2000 increased by 50% with respect to the reference year.
- (d) Measured at constant prices GDP in 2000 is the same as in the base year.

Answer (c)

Question 5

The economy of Utopia consists of three sectors : agriculture, industry and services. In the following table you will find the exchange of goods between those sectors (sales from the row sectors to column sectors) as well as revenues of those sectors. There are no profits in this economy. Data are given in billions of dollars.

	Agriculture	Industry	Services
Agriculture	2	4	1
Industry	5	x	5
Services	4	8	10

	Agriculture	Industry	Services
Labor income	7	1	6
Capital income	6	10	10
Total production	24	36	32

Which of the following statements is correct ?

- (a) Value added in the services sector is 27 billion.
- (b) Final consumption of agricultural products is 6 billion.
- (c) The sales of intermediate products within industry (x) is 13 billion.
- (d) The GDP measured from the production side is 92 billion.

Answer (c)

Question 6

Which of the following is in line with the hypothesis of decreasing marginal returns to factors of production ?

- (a) Continuous economic growth can be ensured only through accumulation of all factors of production or by technological progress.
- (b) If the stock of capital is low, the productivity of all other factors of production is higher than if the stock of capital is high.
- (c) Poor countries grow slower than rich countries if we observe conditional convergence.
- (d) All the above statements are correct.

Answer(a)

Question 7

Take the following data for a closed economy. GDP 700, consumption is 300, private savings is 100 and national savings is 200. Which of the following statements is correct ?

- (a) Taxes are 400 and government spending is 100.
- (b) Taxes are 300 and government spending is 100.
- (c) Taxes are 400 and government spending is 200.
- (d) None of the above.

Answer (d)

Question 8

Assume that in 2011 the consumer price index (CPI) has increased by 20%. In 2011 and 2012 CPI was 120 and 126 respectively. What is the CPI inflation rate in 2012 ?

- (a) 5%.
- (b) 15%.
- (c) 26%.
- (d) We don't have enough information to answer this question.

Answer (a)

Question 9

Assume that the cyclical unemployment rate in a country is 4% whereas the structural unemployment rate is 6%. What is the number of unemployed persons given that labour force in this country amounts to 100 million ?

- (a) 2 millions.
- (b) 4 millions.
- (c) 6 millions.
- (d) 10 millions.

Answer (d)

Question 10

Which of the following can be a reason for a high structural unemployment rate?

- (a) An economic downturn due to a fiscal contraction
 - (b) Moral hazard which causes employers to pay efficiency wages
 - (c) The fact that finding employment is time-consuming
 - (d) Weak bargaining power of labour unions
-

Answer (b)

Question 11

In a closed economy the market for loanable funds is initially in equilibrium. Which of the following exogenous shocks will **certainly** decrease the equilibrium interest rate?

- (a) Firms decide to invest less and households to save less.
 - (b) Firms decide to invest less and the public deficit increases.
 - (c) Investment taxes and taxes on capital gains decrease.
 - (d) Investment taxes increase and the households willingness to save increases.
-

Answer (d)

Question 12

Which of the following statements is correct?

- (a) Money supply (M1) is controlled directly by the central bank.
 - (b) If the central bank increases the refinancing rate, money supply increases.
 - (c) Assume that the reserve requirement is equal to 10% and households keep 10% of their money holdings in cash. An increase of money supply (M1) by 100 000 means thus that the supply of currency (M0) must have increased by 10 000.
 - (d) Assume that the reserve requirement is 20%. Then a bank whose checkable accounts amount to 1 200 000 and reserves amount to 600 000, can immediately give new credits up to 360 000.
-

Answer (d)

- (a) Fausse : seulement la base monétaire.
 - (b) Fausse : les banques commerciales ont moins d'incitations à demander des prêts auprès de la BC et donc la masse monétaire diminue.
 - (c) Fausse : le multiplicateur monétaire est de 5, ou plus précisément $1/(0.1+0.1-0.01)=1/0.19$.
-

Question 13

Which of the following combinations of monetary policies will **certainly** increase money supply ?

- (a) Buying government bonds and decreasing the reserve requirement
- (b) Buying government bonds and increasing the refinancing rate
- (c) Selling governments bonds and decreasing the refinancing rate
- (d) Increasing the reserve requirement and decreasing the refinancing rate

Answer (a)

Question 14

The central bank decides to buy government bonds. Which of the following statements is correct ?

- (a) According to the quantitative theory of money money supply decreases.
- (b) According to the quantitative theory of money if real GDP and the velocity of money stay constant, we will observe inflation.
- (c) If at the same time real GDP and the velocity of money increase, the quantitative theory of money predicts that the price level increases.
- (d) According to the quantitative theory of money real GDP will increase.

Answer (b)

Question 15

Which of the following statement is **false** ? Unexpected inflation :

- (a) benefits creditors.
- (b) can be seen as a tax on cash holders.
- (c) can prevent firms from maximizing profits in the short run.
- (d) can cause tax distortions

Answer (a)

Question 16

Which of the following statements is correct ?

- (a) If inflation in the home country is 3% higher than in the foreign country, the domestic currency will depreciate by less than 3% per year.
- (b) The main objective of the European Central Bank is to keep the interest rate below 2%.
- (c) If the inflation rate is 2% and the nominal interest rate 1%, this means that the real interest rate is negative.
- (d) One of the main arguments supporting the independence of central banks is that it allows the government to maximize seigniorage to finance its debt.

Answer (c)

Question 17

Assume that the world consists of two countries :

Country A		Country B	
Investment	50	GDP	500
Government expenditures	70	Taxes	110
Taxes	20	National savings	150
		Private Savings	50
		Net exports	40

Which of the following statements is correct ?

- (a) In country A private savings is 60 and the government's budget deficit is 50. In country B investment is 110 and consumption is 340.
- (b) In country A private savings is 60 and the government's budget deficit is 50. In country B investment is 150 and consumption is 300.
- (c) In country A private savings is 10 and the government's budget deficit is 50. In country B investment is 150 and consumption is 300.
- (d) In country A private savings and the government's budget deficit are 50. In country B investment is 150 and consumption is 340.

Answer (a)

Question 18

Which of the following statements is correct if a country has adopted fixed exchange rate regime ?

- (a) If the currency is overvalued with respect to the fixed parity, the central bank has to intervene e.g. by increasing the interest rate.
- (b) The central bank has to offset the effects of capital outflow on the exchange rate e.g. by buying domestic currency and paying with foreign reserves.
- (c) If, in order to reduce excess supply of the domestic currency, the central bank buys domestic currency at the target exchange rate, this will necessarily cause inflation in the home country.
- (d) Measures taken by the central bank to keep the exchange rate fixed will not affect the domestic interest rate.

Réponse (b)

Question 19

Which of the following is the definition of purchasing power parity (PPP) ?

- (a) The price of domestic goods relative to foreign goods expressed in the same currency.
- (b) The appreciation or depreciation rate of any currency against the dollar.
- (c) An exchange rate at which one can buy the same amount of domestic and foreign goods for a given amount of money.
- (d) The ratio of expenditures on imports to revenue from exports of goods and services.

Answer (c)

Question 20

Which of the following can cause a depreciation of the dollar, if everything else remains unchanged ?

- (a) The budget deficit of the US increases.
- (b) California introduces a quota on the imports of Japanese cars.
- (c) International speculation with Miami real estate increases.
- (d) Europe introduces a tariff on agricultural imports from the US.

Answer (d)

Question 21

What are the long term effects of an import quota on a given good in an open economy ?

- (a) The volume of trade on the market for domestic currency will decrease.
- (b) The prices of domestic goods will decrease.
- (c) Imports of this good will decrease, while net exports will remain unchanged.
- (d) The currency of the country which introduces the quota will depreciate.

Réponse (c)

Question 22

Which of the following statements is correct ?

- (a) If an open economy is in a macroeconomic equilibrium national savings equal national investment.
- (b) Net exports (X-M) increase if domestic the real interest rate decreases.
- (c) In an open economy a current account deficit implies a budget deficit.
- (d) A real depreciation means a higher purchasing power of domestic goods on international markets.

Answer (b)

Question 23

In a closed keynesian economy consumption (C), taxes (T), investment (I) and public expenditures (G) are given by :

$$C = 200 + 0.75 Y_d$$

$$T = 800$$

$$I = 600$$

$$G = 600$$

where Y_d denotes disposable income. In equilibrium national income Y , consumption C and national savings S equal :

- (a) $Y = 5\ 600$, $C = 4\ 400$, $S = 600$.
- (b) $Y = 3\ 200$, $C = 2\ 600$, $S = 400$.
- (c) $Y = 5\ 600$, $C = 4\ 200$, $S = 1\ 000$.
- (d) $Y = 3\ 200$, $C = 2\ 000$, $S = 600$.

Answer (d)

Question 24

Assume that the households' marginal propensity to consume is 0.75. Which of the following statements is correct ?

- (a) If government expenditure increases by 1000 income will increase by 4000
- (b) An increase of government expenditures by 1000 financed through an equal tax increase increases income by 2000
- (c) If marginal propensity to import is 0.25, an increase of government expenditures by 1000 increases income by 2500
- (d) None of the above.

Answer (a)

Question 25

Which of the following statements about the IS/LM model is correct ?

- (a) In the IS/LM model we assume flexible prices.
- (b) The LM curve represents all income-interest rate pairs for which the market for goods and services is in equilibrium
- (c) An increase of investment at the national level combined with expansionary monetary policy will certainly increase production.
- (d) An increase of investment at the national level combined with expansionary monetary policy will certainly decrease the interest rate.

Answer (c)

Question 26

Which of the following statements is necessarily **false** :

- (a) Monetary policy can be conducted through open market operations, setting the minimum reserve requirement and through changing the refinancing rate at which banks can borrow money from the central bank.
- (b) In the short run, an increase in money supply causes a proportional increase in prices. Over time the latter decrease again.
- (c) Unemployment benefits are automatic stabilizers.
- (d) The positive effect of expansionary fiscal policy on production is reduced by crowding out.

Answer (b)

Question 27

According to the theory of sticky wages :

- (a) prices adjust slowly to a decrease in nominal wages. Firms face lower wages and since prices stay high they increase the level of production and thus employment. This results in higher aggregate supply.
- (b) wages adjust slowly to a decrease in prices. Firms face lower prices and since the costs of production stay high they have to decrease production and thus employment. This decreases aggregate supply.
- (c) not all firms immediately adjust their prices in reaction to a decrease in the price level. These firms face higher prices and thus they increase production, which increases aggregate supply.
- (d) prices react more than proportionally to increases in nominal wages. Producers face higher wages, but since prices increase more than wages they want to increase production. This results in higher aggregate supply.

Answer (b)

Question 28

According to the AS-AD model an increase of public investment

- (a) might decrease GDP in the short run because of crowding out.
- (b) decreases prices in the short run which stimulates an economic recovery.
- (c) does not change long run aggregate supply.
- (d) increases aggregate supply which is depicted as a shift of the AS curve to the right.

Answer (c)

Question 29

Take a graph with the unemployment rate on the horizontal axis and the inflation rate on the vertical axis. Which of the following will shift the Phillips curve towards north-east ?

- (a) A positive aggregate demand shock
- (b) Contractionary monetary policy
- (c) A negative aggregate supply shock
- (d) A decrease in expected inflation

Answer (c)

Question 30

Which of the following policies implemented in the European Union's rescue plan for Cyprus in spring 2013 represented a novel approach in European economic policy

- (a) Two main local banks will be closed.
- (b) All deposits in Cypriot banks were frozen for an indeterminate period.
- (c) Cyprus will leave the Eurozone
- (d) Savings deposits over a certain value will not be guaranteed by the European Union.

Answer (d)
