Department of Economics
University of Toronto

Prof. Gustavo Indart
June 22, 2015

ECO 209Y – L0101
MACROECONOMIC THEORY

Term Test #2

LAST NAME ______________________________

FIRST NAME ______________________________

STUDENT NUMBER ______________________________

INSTRUCTIONS:

1. The total time for this test is 2 hours.
2. Aids allowed: a simple calculator.
3. Use pen instead of pencil.

DO NOT WRITE IN THIS SPACE

Part I		____________/36
Part II		____________/14
Part III	1.	____________/10
	2.	____________/10
	3.	____________/10

TOTAL ____________/80

PART I (36 marks)

Instructions:

- Enter your answer to each question in the table below.
- Each correct answer is worth 2 marks. ***Note that a deduction of 0.5 mark will be made for each incorrect answer.*** Table cells left blank will receive a zero mark (i.e., no deduction).
- **Do NOT guess your answers!**

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**

Correct: ______ Incorrect: ______ Blank: ______

1. Consider the model of a closed economy with a fixed price-level. If the interest-sensitivity of investment increased, which one of the following statements would be correct with respect to income?

A) Both fiscal and monetary policy would become more effective.
B) Both fiscal and monetary policy would become less effective.
C) Fiscal policy would become less effective and monetary policy would become neither more nor less effective.
D) Fiscal policy would become more effective and monetary policy would become less effective.
E) Fiscal policy would become less effective and monetary policy would become more effective.

2. If bond holders expect the price of bonds to fall, they will

A) reduce their demand for bonds and increase their demand for money.
B) reduce their demand for both bonds and real balances.
C) reduce their demand for money and increase their demand for bonds.
D) also expect the rate of interest to drop.
E) reduce their money holdings.

Use this space for rough work.

3. Consider the fixed-price level model of a closed economy. If the central bank tightens monetary policy so that the interest rate increases and GDP decreases,

- **A)** tax revenues will decrease, decreasing the government's actual deficit, and increasing the full-employment deficit.
- **B)** tax revenues will increase, decreasing the government's actual deficit, and decreasing the full-employment deficit.
- **C)** tax revenues will decrease, increasing the government's actual deficit, but not changing the full-employment budget balance.
- **D)** tax revenues will increase, decreasing the government's actual deficit, but not changing the full-employment budget balance.
- **E)** tax revenues will increase, decreasing the government's actual deficit, and increasing the full-employment budget balance.

4. When the economy is in a liquidity trap, expansionary monetary policy is ineffective with respect to income because

- **A)** investment is insensitive to changes in the rate of interest.
- **B)** the public already holds all the money they want.
- **C)** the real demand for money is insensitive to changes in the rate of interest.
- **D)** the public is willing to hold any amount of money being offered at the current rate of interest.
- **E)** none of the above.

5. If bond holders attempt to sell bonds in order to increase their money holdings, at the end of the process of adjustment

- **A)** the money held by individuals and businesses will increase by the same amount as their bond holdings will decrease.
- **B)** the money held by individuals and businesses will decrease by the same amount as their bond holdings will increase.
- **C)** individuals and business will reduce their bond holdings but will keep their money holdings unchanged.
- **D)** individuals and businesses will keep both their total money holdings and their total bond holdings unchanged.
- **E)** individuals and business will reduce both their bond holdings and their money holdings by the same amount.

6. In the fixed-price model of a closed economy, fiscal policy is more effective in increasing national income when

- **A)** money demand is very responsive to income changes.
- **B)** consumption is very responsive to interest rate changes.
- **C)** money demand is not very responsive to interest rate changes.
- **D)** the income tax rate is very high.
- **E)** investment is not very responsive to interest rate changes.

Use this space for rough work.

7. Consider the IS-LM framework in a fixed-price level model of a closed economy. Any point below the LM curve depicts a situation of
- **A)** excess demand in the goods market and excess supply in the money market.
- **B)** excess supply in the money market.
- **C)** excess demand in the money market.
- **D)** excess demand in both the goods and money markets.
- **E)** excess supply in the money market but equilibrium in the goods market.

8. If a country chooses to have free capital flows and to conduct an independent monetary policy, then it must:
- **A)** live with exchange-rate volatility.
- **B)** restrict its citizens from participating in world financial markets.
- **C)** give up the use of monetary policy for purposes of domestic stabilization.
- **D)** have a fixed exchange rate.
- **E)** have a managed exchange rate.

9. Consider an open economy with a fixed price-level, flexible exchange rates, and infinitely elastic capital flows (i.e., perfect capital mobility). An increase in government expenditure will cause
- **A)** output and interest rate to increase, and domestic currency to depreciate.
- **B)** output and interest rate to increase, and domestic currency to appreciate.
- **C)** domestic currency to appreciate, while output and interest rate will remain unchanged.
- **D)** domestic currency to appreciate, output to rise, but interest rate will remain unchanged.
- **E)** domestic currency to appreciate, interest rate to rise, but output will remain unchanged.

10. Consider a fixed-price model of an open economy with perfect capital mobility and flexible exchange rates. If the foreign interest rate increases by 3 percentage points and the exchange rate is expected to appreciate by 2 percent, in the new equilibrium the domestic interest rate will
- **A)** increase by 2 percentage points.
- **B)** increase by 1 percentage point.
- **C)** decrease by 1 percentage point.
- **D)** increase by 3 percentage points .
- **E)** increase by 5 percentage points.

Use this space for rough work.

11. Consider the fixed-price level model of an open economy with flexible exchange rates and perfect capital mobility. Which of the following incidents will lead to an improvement in the balance of the current account?

- **A)** An expansionary fiscal policy.
- **B)** A decrease in consumer's confidence.
- **C)** A contractionary monetary policy.
- **D)** A decrease in foreign interest rate.
- **E)** A decrease in foreign income.

12. Consider the fixed-price level model of an open economy with fixed exchange rates and perfect capital mobility. Which of following events will cause the real supply of money to contract in the new equilibrium?

- **A)** A revaluation of the exchange rate.
- **B)** An increase in foreign income.
- **C)** A rise in the foreign rate of interest.
- **D)** The Central Bank sells bonds.
- **E)** The government increases its spending.

13. Suppose that income per capita in Brazil is 27,500 reales and that the nominal exchange rate for Brazilian reales is 0.40. Further suppose that a given consumption basket of goods and services costs $8,100 in Canada and 15,000 reales in Brazil. Using the PPP exchange rate, income per capita in Brazil is

- **A)** $5,090.
- **B)** $11,000.
- **C)** $14,850.
- **D)** $50,925.
- **E)** $68,750.

14. The BP curve will be flatter,

- **A)** the larger the marginal propensity to import.
- **B)** the larger the interest responsiveness of capital flows.
- **C)** the larger the money supply.
- **D)** the larger the marginal propensity to consume.
- **E)** the smaller the interest sensitivity of investment.

Use this space for rough work.

15. In a fixed-price model of an open economy with perfect capital mobility and **fixed** exchange rates, a decrease in autonomous taxes will

- **A)** partially crowd out investment due to the interest rate increase.
- **B)** crowd out net exports due to a currency appreciation.
- **C)** increase net exports due to a currency depreciation.
- **D)** increase consumption and net exports but leave investment unchanged.
- **E)** cause none of the above.

16. In a fixed-price model of an open economy with perfect capital mobility and **flexible** exchange rates, a decrease in autonomous taxes will

- **A)** partially crowd out investment due to the interest rate increase.
- **B)** crowd out net exports due to a currency appreciation.
- **C)** increase net exports due to a currency depreciation.
- **D)** increase consumption and net exports but leave investment unchanged.
- **E)** cause none of the above.

17. Consider a fixed-price level model of an open economy with flexible exchange rates and imperfect capital mobility. An increase in the tax rate will cause

- **A)** output and interest rate to fall, and exchange rate to rise.
- **B)** output to fall, and interest rate and exchange rate to rise.
- **C)** output, rate of interest and the exchange rate to fall.
- **D)** output, rate of interest and exchange rate to rise.
- **E)** output to rise, and rate of interest and exchange rate to fall.

18. Consider a fixed-price level model of an open economy with flexible exchange rates and imperfect capital mobility. If the government wishes to reduce interest rates without reducing the value of the Canadian dollar, the government should

- **A)** increase its expenditure and cut the money supply.
- **B)** raise its expenditure and raise the money supply.
- **C)** leave its expenditure unchanged while increasing the money supply.
- **D)** lower its expenditure and cut the money supply.
- **E)** lower its expenditure and raise the money supply.

Use this space for rough work.

PART II (14 marks)

Consider an open economy with fixed prices, flexible exchange rates, and imperfect capital mobility. This economy is characterized by the following equations:

$C = 100 + 0.8\ YD$	$TA = 0.25\ Y$
$I = 150 - 20\ i + 0.1\ Y$	$TR = 50$
$G = 250$	$L = 0.2\ Y - 10\ i$
$X = 100 + 200\ e$	$M/P = 200$
$Q = 200 - 100\ e + 0.1\ Y$	$CF = 10\ (i - 21)$

a) What is the equation for the *IS* curve in this economy? *Show all your work.* **(2 marks)**

b) What is the equation for the *LM* curve in this economy? *Show all your work.* **(2 marks)**

c) What is the equation for the *BP* curve in this economy? *Show <u>all</u> your work.* **(2 marks)**

d) What are the equilibrium values of *Y*, *i* and *e* in this economy? **(3 marks)**

e) Suppose that the international rate of interest increases. What will be the impact on the values of *Y*, *i* and *e* you estimated above? What will be the impact on the balances of the current and capital account? Explain your answers. *[Note: Although not necessary, a graphical analysis of this situation might be helpful when answering the question.]* **(5 marks)**

PART III (30 marks)

Instructions: Answer the following three questions in the space provided. You may continue your answer on page 12 if additional space is required (***but clearly indicate that your answer continues on page 12***). Each question is worth 10 marks.

1. **Critically evaluate the following statement:** *"A devaluation of the domestic currency will cause the level of income to increase, the rate of interest to rise, the balance in the current account to improve, and the balance in the capital account to deteriorate."* **(Show your answer with the help of a diagram and explain the economics. Consider the fixed-price model of an open economy with imperfect capital mobility.)**

(Continue on pages 13-14 if necessary)

2. **Critically evaluate the following statement:** *"If, due to greater uncertainty in the world economy, foreign investors choose to invest more in a safe country such as Canada, then Canada's GDP will rise, its rate of interest will fall, the balance in its capital account will improve, and the balance in its current account will deteriorate."* **(Show your answer with the help of a diagram and <u>explain</u> the economics. Consider the model of an open economy with a fixed-price level, <u>flexible</u> exchange rates, and <u>imperfect</u> capital mobility.)**

(Continue on pages 13-14 if necessary)

3. Comment on the following statement: *"A decrease in consumers' preference for vacationing abroad will lead to an increase in GDP, an increase in the interest rate, an improvement in the capital account, and a deterioration in the current account."* **(Show your answer with the help of a diagram and <u>explain</u> the economics. Consider the fixed-price model of an open economy with <u>fixed</u> exchange rates and <u>imperfect</u> capital mobility.)**

(Continue on pages 13-14 if necessary)

(Continue on this page if necessary)

(Continue on this page if necessary)