UNIVERSITY OF TORONTO
Faculty of Arts and Science

August Examination 2014

ECO 209Y

Duration: 2 hours

Examination Aids allowed: Non-programmable calculators only

LAST NAME ____

FIRST NAME ____

STUDENT NUMBER ________________________________

DO NOT WRITE IN THIS SPACE

Part I		___________/50	3.	___________/10
Part II	1.	___________/10	4.	___________/10
	2.	___________/10	5.	___________/10
			TOTAL	___________/100

PART I (50 marks)

Instructions: Enter your answer to each question in the table below. Only the answers recorded in the table will be marked. Table cells left blank will receive a zero mark for that question. Each question is worth 2.5 marks. No deductions will be made for incorrect answers.

1	2	3	4	5	6	7	8	9	10
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**

1. Suppose that national income (Y) is 7,500; disposable income (YD) is 6,800; consumption (C) is 5,600; budget deficit (BD) is 150; and net exports (NX) is 100. What is the level of investment (I)?
   A) 1,150.
   B) 1,050.
   C) 950.
   D) 850.
   E) None of the above.

2. It is often true that as the economy begins to recover from a recession the unemployment rate rises. Which of the following statements would be the best explanation for this?
   A) The unemployment rate would rise because as the economy initially recovers from a recession the demand for goods and services falls, so the demand for workers falls.
   B) As the economy begins to recover from a recession, workers who were previously discouraged about their chances of finding a job begin to look for work again.
   C) The unemployment rate seems to rise as the economy begins to recover from a recession because of errors in the way the data are collected.
   D) As the economy initially recovers from a recession, firms do not immediately increase the number of workers they hire. Firms wait to hire more individuals until they are convinced that the recovery is strong.
   E) The unemployment rate would rise because as the economy recovers and income rises, workers decide to work less and enjoy more leisure.

Use this space for rough work.

3. Consider the fixed-price, aggregate expenditure model of the economy. If the marginal tax rate increases, which one of the following will be true in the short run?
   A) The aggregate expenditure curve becomes steeper.
   B) Equilibrium output rises.
   C) Disposable income increases.
   D) Savings decreases.
   E) None of the above.

4. Consider a small open economy with flexible exchange rates and imperfect capital mobility. If exports are $20 billion, imports are $35 billion, government budget surplus is $5, and the value of domestic national saving is $25 billion, then what is the value of capital flows?
   A) $5 billion.
   B) $10 billion.
   C) $15 billion.
   D) $25 billion.
   E) It cannot be determined with the information provided.

5. All else equal, an increase in the marginal propensity to save out of disposable income (MPS_{YD}) will cause a
   A) parallel shift up in the AE curve and a parallel shift up in the IS curve.
   B) rotational shift up in the AE curve and a rotational shift up in the IS curve.
   C) parallel shift down in the AE curve and a rotational shift up in the IS curve.
   D) rotational shift down in the AE curve and a rotational shift down in the IS curve.
   E) rotational shift down in the AE curve and a rotational shift up in the IS curve.

6. The reason that an increase in autonomous spending leads to an even greater increase in equilibrium income is that
   A) as firms increase output to meet demand, income increases, and this induces more consumption spending.
   B) the multiplier increases with an increase in autonomous spending.
   C) people save less and spend more as their income increases.
   D) there is unwanted inventory accumulation, leading firms to lower prices thereby encouraging increased consumer spending.
   E) the demand for money increases.

Use this space for rough work.

7. Consider the IS-LM model discussed in class. If the government increases autonomous taxes and government purchases by equal amounts, which one of the following statements best describes the likely outcome in the short run?
   A) Income, the interest rate, consumption, and investment will remain unchanged.
   B) Income, the interest rate and consumption will all rise, whereas investment will fall.
   C) Income and the interest rate will fall, whereas consumption and investment will rise.
   D) Income, the interest rate, consumption, and investment will all rise.
   E) None of the above.

8. Consider the fixed-price model of an open economy with imperfect capital mobility and a fixed exchange rate. If the U.S. government imposes a 10 percent tariff on all imports from Canada, which one of the following best describes the likely impact on the short-run equilibrium of the Canadian economy?
   A) The level of income will fall, the money supply will increase, and the rate of interest will fall.
   B) The level of income will rise, the money supply will increase, and the rate of interest will fall.
   C) The level of income will fall, the money supply will decrease, and the rate of interest will rise.
   D) The level of income will fall, the money supply will decrease but the rate of interest might rise or fall.
   E) The level of income will rise, the money supply will increase, but the rate of interest might rise or fall.

9. On July 9, 2014 the nominal interest rate paid on 3-month federal government Treasury Bills was 0.94% in Canada and 0.03% in the US. On that date one U.S. dollar could buy 1.07 Canadian dollars. According to the interest parity condition, on that date the financial markets were most likely expecting
   A) the nominal interest rate differential between the U.S. and Canada to fall and the exchange rate for the US dollar to depreciate by more than 0.91%.
   B) the nominal interest rate differential between the U.S. and Canada to fall and the exchange rate for the US dollar to appreciate by less than 0.91%.
   C) the nominal interest rate differential between the U.S. and Canada to remain unchanged and the exchange rate for the US dollar to appreciate by 0.91%.
   D) the nominal interest rate differential between the U.S. and Canada to remain unchanged and the exchange rate for the US dollar to depreciate by 0.91%.
   E) both the nominal interest rate differential between the U.S. and Canada and the exchange rate for the US dollar to remain unchanged.

Use this space for rough work.

10. Consider a small open economy with a fixed price-level, flexible exchange rates, and perfect capital mobility. Given an increase in autonomous exports, which one of the following statements would be true in the new equilibrium?
    A) The domestic currency would appreciate, the balance in the current account would improve, the rate of interest would rise, and income would increase.
    B) The domestic currency would appreciate, the balance in the current account would deteriorate, the rate of interest would rise, and income would increase.
    C) The domestic currency would depreciate, the balance in the current account would improve, the rate of interest would remain unchanged, and income would increase.
    D) The domestic currency would appreciate, the balance in the current account would improve, the rate of interest would remain unchanged, and income would increase.
    E) The domestic currency would appreciate while the balance in the current account, the rate of interest, and income would remain all unchanged.

11. Consider a small open economy with a fixed price-level, flexible exchange rates, and a high degree of capital mobility. A decrease in the U.S. interest rate would cause
    A) the domestic currency to appreciate, the domestic rate of interest to decrease, and equilibrium income to fall.
    B) the domestic currency to appreciate, the domestic rate of interest to decrease, and equilibrium income to increase.
    C) the domestic currency to depreciate, the domestic rate of interest to decrease, and equilibrium income to increase.
    D) the domestic currency to appreciate with no change in the rate of interest and equilibrium income.
    E) none of the above.

12. Consider an open economy with a fixed price-level, flexible exchange rates, and a high degree of capital mobility. Suppose that as a result of greater uncertainty in the world economy, foreign investors choose to invest more in a safe country such as Canada. Given the above, which of the following statements best describes the most likely outcome in Canada?
    A) The rate of interest and net exports will both fall.
    B) The rate of interest will fall but net exports will rise.
    C) The rate of interest will rise but net exports will fall.
    D) The rate of interest and net exports will both rise.
    E) The rate of interest will remain unchanged but net exports will fall.

Use this space for rough work.

13. Suppose the economy is in recession and facing a liquidity trap. Which of the following policies would best help the economy to recover?
    A) A decrease in personal income tax rates.
    B) The central bank buys government bonds from the public.
    C) A decrease in corporate tax rates.
    D) The central bank reduces the bank rate.
    E) An increase infrastructure expenditure.

14. Which of the following actions will lead to an expansion of the money supply?
    A) The government of Canada sells bonds to the Bank of Canada.
    B) The Bank of Canada buys government bonds from the public.
    C) The government of Canada sells bonds to the commercial banks.
    D) The government of Canada sells bonds to the public.
    E) Both A) and B) above.

15. Consider the <u>general</u> AS-AD (upwards sloping AS) model developed in class. Which of the following statements is most likely to hold in the short run?
    A) A decrease in the price level will shift the AD curve to the right.
    B) The nominal wage is fixed at a particular level.
    C) A decrease in the reserve ratio (re) will cause investment to rise.
    D) Output is constant at its long-run equilibrium level.
    E) If the real wage increases, the supply of labour necessarily does so too.

16. Consider an economy described by a New-Keynesian model with downwards sticky wages. Which of the following best describes the likely short-run impact of an increase in autonomous imports?
    A) A decrease in output, increase in the interest rate, and no change in the nominal wage.
    B) An increase in output, a decrease in the interest rate, and an increase in the nominal wage.
    C) A decrease in output, a decrease in the interest rate, and an increase in the real wage.
    D) A decrease in output, an increase in the interest rate, and no change in the nominal wage.
    E) An increase in output, an increase in the interest rate, and a decrease in the real wage.

Use this space for rough work.

17. In the orthodox AD-AS model discussed in class, which of the following is true?
    A) An increase in the interest sensitivity of real balances will cause real wages to rise.
    B) An increase in government spending has no effect on the real interest rate.
    C) An increase in the nominal money supply has no effect on the real interest rate.
    D) A decrease in government purchases causes investment to fall.
    E) None of the above is true.

18. A person quits her job to dedicate more time searching for a better job in the same industry. What best describes the type of unemployment this person is experiencing?
    A) Frictional unemployment.
    B) Cyclical unemployment.
    C) Involuntary unemployment.
    D) Structural unemployment.
    E) Cyclical and involuntary unemployment.

19. Consider an economy described by the dynamic AS-AD model discussed in class. Upon experiencing a negative supply shock, the government introduces expansionary aggregate demand policies to prevent the fall of output. Which of the following is true immediately following both actions?
    A) The real wage remains unchanged.
    B) The nominal wage increases.
    C) The nominal wage decreases.
    D) The nominal wage remains unchanged.
    E) The real wage increases.

20. Consider an economy described by the dynamic AS-AD model discussed in class. If the public are able to anticipate the future inflation rate (Rational Expectations), which of the following best describes the likely short-run impact of a money supply increase?
    A) Output is above its long-run level and the expected inflation rate is below the long-run rate.
    B) Output is equal to its long-run level and the expected inflation rate is below the long-run rate.
    C) Output is above its long-run level and the expected inflation rate is above the long-run rate.
    D) Output is equal to its long-run level and the expected inflation rate equals the long-run rate.
    E) Output is below its long-run level and the expected inflation rate is above the long-run rate.

Use this space for rough work.

PART II (50 marks)

<u>Instructions</u>: Answer <u>all</u> five questions in the space provided. All questions are of equal weight.

1. Comment on the following statement: *"By shifting its monetary-policy regime to target a 4 percent annual inflation rate, the US would set in motion rapid rebalancing in the eurozone. Indeed, German exporters would scream for the European Central Bank to implement measures to prevent America's 'competitive devaluation,' finally bringing about moderate inflation in the north (e.g., in Germany and France) rather than the current crushing depression in the south (e.g., in Portugal, Italy, Greece and Spain)."*

(Continue on pages 13-14 if necessary)

2. Consider a hypothetical country (let's call it *Ontario*) with a GDP of $720 billion in 2013. The national government's deficit is $11.3 billion and its accumulated total debt is $270 billion. Government revenues as percentage of GDP are 16.8 percent, while they were 17.4 percent in 2008. The country's unemployment rate is 7.5 percent, while it was only 6.5 percent in 2008 and as high as 9.0 percent in 2009. This country doesn't have a central bank and has adopted the currency of its largest neighbour as its own. An influential adviser to the minister of finance analyzes the above economic data and concludes: *"Strong action is required to avert an imminent crisis. The government deficit must be eliminated in two years and the national debt must be reduced to manageable levels within the next 10 years."* Do you agree with this economic adviser's conclusion? (Note: You must justify your answer based on your own analysis of the above data.)

(Continue on pages 13-14 if necessary)

3. The Central Bank of a hypothetical country decides to reduce the rate of inflation in the economy. The Bank is not sure, however, whether this decision is perfectly credible (in the eyes of the public) or not. Notwithstanding, the Bank goes ahead and adopts the “Cold Turkey” approach to reduce the rate of inflation while simultaneously announcing to the public that π_1 is now the new target inflation rate. Compare the transition paths of output and inflation in both cases, i.e., when the Central Bank decision is perfectly credible and when it is not. If the government relies on Seignorage to finance its expenditure, which situation is the Bank likely to encounter? [Note: <u>Explain</u> the economics using the expectations-augmented AS-AD diagrams, where AS is $\pi = \pi^e + \lambda(Y - Y^*)$ and beliefs are adaptive when the Central Bank is non-credible.]

(Continue on pages 13-14 if necessary)

4. Consider a flexible-price model of an open economy with fixed exchange rates and no capital mobility. The foreign price level suddenly drops, moving the economy away from the initial situation of internal and external balance. Rather than changing the value of its currency and implementing activist economic policy, the government decides to allow the market restore the simultaneous situation of internal and external balance. With the help of a diagram and using the AD-AS-NX model developed in class, explain the process of adjustment as determined by the market mechanism.

(Continue on pages 13-14 if necessary)

5. Consider the Case Study on interest rates and inflation during the 2000s discussed in class. What were the main causes of the low inflation and low interest rates experienced in the years prior to the Great Recession? What role may the undervaluation of the Renminbi have played in all this? In Allan Greenspan's view, how likely were these low interest rates and inflation to persist beyond 2006? Briefly explain. How may all this have contributed to the onset of the Great Recession? Were Greenspan's expectations realized after 2006? Why or why not? Briefly explain.

(Continue on pages 13-14 if necessary)

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