UNIVERSITY OF TORONTO
Faculty of Arts and Science

August Examination 2016

ECO 209Y

Duration: 2 hours

Examination Aids allowed: <u>Non-programmable</u> calculators <u>only</u>

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. The Consumer Price Index in Canada had values of 100.0 in 1981 and 110.8 in 1982. The nominal rate of interest (i.e., the yield of a one-year government bond) was 18% on average in 1982. What was the average real rate of interest in 1982?
   A) 18%.
   B) 25.2%.
   C) 10.8%.
   D) 7.2%.
   E) It's impossible to determine.

2. Consider an economy without depreciation of the capital stock, without government transfer payments, and where personal income tax is the only source of government revenues. If GDP is $980 billion, consumption is $650 billion, private savings is $120 billion, government purchases is $180 billion, and net exports is -$30 billion, which of the following is true in this economy?
   A) Disposable income is $860.
   B) Investment is $120.
   C) The budget deficit is -$30.
   D) Personal income tax is 250.
   E) None of the above is true.

Use this space for rough work.

3. If private savings exceed investment by $50 billion and tax revenues exceed government spending by $10 billion, then
   A) the trade deficit is $40 billion.
   B) the trade surplus is $60 billion.
   C) the trade deficit is $60 billion.
   D) the trade surplus is $40 billion.
   E) we cannot say anything about the international trade balance.

4. Consider an open economy with a fixed-price level, fixed exchange rates, and perfect capital mobility. Which of following events will cause the LM curve to shift to the right?
   A) A decrease in foreign income.
   B) A rise in the foreign rate of interest.
   C) The Central Bank sells government bonds in the open market.
   D) A revaluation of the exchange rate.
   E) The government cuts its spending.

5. Consider an open economy with a fixed-price level and fixed exchange rates. The introduction of a stylish new line of Toyotas, which makes many consumers prefer foreign cars over domestic cars, will lead to
   A) a rise in income, the money supply, and net exports.
   B) no change in income and net exports but a rise in the money supply.
   C) a fall in income but no change in net exports and the money supply.
   D) no change in income but a fall in net exports and a rise in the money supply.
   E) a fall in income, net exports, and the money supply.

6. Suppose the domestic interest rate is 10 percent and the international interest rate is 6 percent. If the exchange rate is expected to appreciate by 2 percent, which one of the following would describe the likely short-run outcome?
   A) There will be a decrease in the net inflow of capital.
   B) There will be an increase in the net inflow of capital.
   C) There will be an increase in the net outflow of capital.
   D) There will be a decrease in the net outflow of capital.
   E) The flow of capital will not be affected.

7. Consider an open economy with a fixed-price level, fixed exchange rates, and imperfect capital mobility. If the central bank devalued the exchange rate (i.e., revalued the domestic currency), which one of the following would be correct?
   A) Both the IS and BP curves would shift down.
   B) Both the IS and BP curves would shift up.
   C) The IS curve would shift up but the BP curve would remain unchanged.
   D) The IS curve would shift up and the BP would shift down.
   E) The IS curve would shift down and the BP would shift up.

Use this space for rough work.

8. Consider the Classical model of the economy where the production function is $Y = 20\ N^{1/2}$ and the supply of labour is $W/P = N^{1/2} / 10$. What is the equation for the AS curve in this economy?
   A) $Y = 200\ P^{-1/2}$
   B) $Y = 200\ P^{1/2}$
   C) $Y = 200\ P$
   D) $Y = 200$
   E) None of the above.

9. Consider an open economy with a fixed-price level, flexible exchange rates, and imperfect capital mobility. An decrease in the money supply will cause
   A) output, interest rate, and exchange rate to increase.
   B) output and interest rate to increase, and exchange rate to decrease.
   C) output and exchange rate to decrease, and interest rate to increase.
   D) output and exchange rate to increase, and interest rate to decrease.
   E) output to decrease, and exchange rate and interest rate to increase.

10. Consider the AD-AS model where the AS curve is given by $P = P_{-1} + \lambda(Y - Y^*)$. If a positive demand shock occurs, which one of the following statements best describes the likely outcome in the short run?
   A) The nominal wage will increase but the real wage will remain unchanged.
   B) The nominal wage will increase and the real wage will decrease.
   C) The nominal wage will remain unchanged but the real wage will decrease.
   D) Both the nominal and the real wage will increase.
   E) Both the nominal and the real wage will decrease.

11. Consider the AD-AS model where workers do suffer from “money illusion”. If workers decided to supply more labour at all levels of real wages, which of the following statements would be correct?
   A) Both the real wage and the price level increase.
   B) Both the real wage and the price level decrease.
   C) The real wage increases while the price level stays constant.
   D) The real wage increases and the price level decreases.
   E) The real wage decreases and the price level increases.

12. Consider an economy described by the dynamic AS-AD model where the AS curve is given by $P = P_{-1} + \lambda(Y - Y^*)$. This economy is currently in long-run equilibrium. Which of the following describes the short-run impact of an increase in autonomous consumption?
   A) Both the real and nominal wage increase.
   B) Both the real and nominal wage decrease.
   C) The real wage decreases and the nominal wage increases.
   D) The real wage remains unchanged and the nominal wage increases.
   E) The real wage increases and the nominal wage remains unchanged.

Use this space for rough work.

13. Suppose the Bank of Canada wishes to implement expansionary monetary policy. Which of the following actions would allow it to achieve this objective?
    A) Monetize the government deficit.
    B) Sell government of Canada bonds in the secondary market.
    C) Increase the target for the overnight rate.
    D) Sell foreign currency in the exchange market.
    E) Raise the bank rate.

14. Suppose that the assets market consists of only bonds and money. If bond holders expect the price of bonds to fall, they will
    A) also expect the rate of interest to drop.
    B) reduce their money holdings.
    C) reduce their demand for both bonds and real balances.
    D) reduce their demand for money and increase their demand for bonds.
    E) reduce their demand for bonds and increase their demand for money.

15. Consider a new deposit of $10 000 to the Canadian banking system. Assuming that all banks are initially holding the desired level of reserves, the bank that initially receives this deposit will find itself with
    A) no excess reserves if there is no reserve requirement.
    B) $1 000 of excess cash reserves if its desired reserve ratio is 10 percent.
    C) $2 000 of excess cash reserves if its desired reserve ratio is 10 percent.
    D) $8 000 of excess cash reserves if its desired reserve ratio is 20 percent.
    E) $10 000 of excess cash reserves if its desired reserve ratio is 100 percent.

16. Consider an economy currently in equilibrium. The public hold 20% of their money holdings (M) in cash (CU_P). Banks hold 15% of public's deposits (D) as reserves (R) and currently hold $45 as reserves. Which of the following statements is correct?
    A) The monetary base (B) is $120.
    B) The money multiplier (mm) is approximately 3.5.
    C) The money supply is $350.
    D) The quantity of cash held by the public (Cu_p) is $75.
    E) Both A) and D) are correct.

Use this space for rough work.

17. If the Bank of Canada responds to a negative supply shock by implementing expansionary monetary policy, then
    A) inflation will accelerate even more.
    B) inflation will slowdown but unemployment will increase even more.
    C) the inflation rate and the rate of unemployment will further increase.
    D) firms will further increase their product prices and cut their production.
    E) cost of production will be reduced and the AS curve will shift back to the right.

18. All else equal, which of the following statements describes the long-run impact of an increase in the expected rate of inflation?
    A) The rate of inflation will increase, real wages will rise, and real output will increase.
    B) The rate of inflation, real wages, and real output will all remain unchanged.
    C) The rate of inflation will increase, while real wages and real output will remain unchanged.
    D) The rate of inflation and output will remain unchanged, but real wages will fall.
    E) The rate of inflation and real wages will increase, but real output will remain unchanged.

19. When actual inflation is greater than expected inflation
    A) there are real income transfers from lenders to borrowers.
    B) unemployment rises, according to Phillips-curve analysis.
    C) cyclical unemployment rises, according to Phillips-curve analysis.
    D) both nominal and real wages increase.
    E) nominal wages do not change in the current period.

20. Denmark, Switzerland and Sweden have reduced their respective policy rates to negative values. Which one of the following summarizes the main reason for implementing such a policy?
    A) To boost consumption expenditure and reduce the risk of deflation.
    B) To increase investment expenditure and restore economic growth.
    C) To reduce capital inflows to slow down currency appreciation.
    D) To reduce the cost of financing government deficits.
    E) To redistribute income from lenders to borrowers.

Use this space for rough work.

PART II (50 marks)

<u>Instructions</u>: Answer <u>all</u> five questions in the space provided. If additional space is needed, you may continue your answer on page 12. All questions are of equal weight.

1. Critically comment on the following statement: *"In the 2000s, both before and after the start of the Great Recession, the single-digit inflation experienced by all developed countries and most major emerging markets was the result of strong macroeconomic policy-coordination among the governments of all these countries."*

(Continue on page 12 if necessary)

2. The ECB and the central banks of Japan and some European countries are charging interest on the deposits they are taking from commercial banks (i.e., negative rate of interest). What is the rationale for this policy? What will be its likely impact? Will negative interest rates help persuade banks to lend more money to their customers? Why or why not? If banks' corporate clients were also charged a negative interest rate on their deposits, would it help persuade them to increase their expenditures on productive investment? Why or why not?

(Continue on page 12 if necessary)

3. Critically comment on the following statement: *"If individuals expect the rate of inflation to fall, then output and the rate of inflation will both decrease in the long run."* (Show your answer with the help of a diagram and explain the economics. Consider a closed economy with a flexible-price level, adaptive expectations, and initially at full employment equilibrium.)

(Continue on page 12 if necessary)

4. With the help of a diagram, describe and <u>explain</u> the likely impact of the Fed's quantitative easing policy on an emerging market economy. (Consider an open economy with a fixed-price level, flexible exchange rates and imperfect capital mobility. Assume that this emerging market economy was initially at full employment equilibrium.)

(Continue on page 12 if necessary)

5. Critically comment on the following statement: *"In the absence of active government policy, a negative supply shock will cause the price level to increase, the level of output to decrease, and the real wage rate to fall in the long run."* (Show your answer with the help of a diagram and explain the economics. Consider the dynamic *AD-AS* model of a closed economy where the short-run aggregate supply curve is $P = P_{-1}\,[1 + \lambda(Y - Y^*)]$).

(Continue on page 12 if necessary)

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