ECO 301: Money and Banking
Instructor: Dr. James Murray
Fall 2016
Practice Exam 2

Name: ______________________________

1. Suppose an economy has the following characteristics:
   - The required reserve ratio is 10%
   - Banks hold excess reserves equal to 5% of the total deposits.
   - Consumers and businesses hold currency levels equal to 8% of total deposits.

2. Suppose the Fed conducts an open market purchase of $200 billion in government bonds.
   (a) (5 points) Compute the change in money supply.

   (b) (5 points) Compute the change in deposits.

   (c) (5 points) Compute the change in total reserves.

   (d) (5 points) Describe and illustrate the immediate impact on equilibrium real money balances and real interest rates.

3. Suppose the economy is at its full employment equilibrium, when a shock to businesses' economic outlook causes a decrease in investment spending.

   (a) (5 points) Describe and illustrate the short-run impact on real GDP and price level.

   (b) (10 points) Prescribe a monetary policy to achieve price stability and bring GDP to potential GDP. Describe and illustrate the equilibrium effects on the quantity of money, interest rate, real GDP, and price level.

4. (5 points) Describe the impact that the interest rate has on each component of aggregate expenditure.

5. (10 points) Suppose there is an improvement in financial technology that causes people to hold more of their assets in stocks and bonds, and less in money. Moreover, the financial technology causes people to hold most of their money in checking deposits, decreasing the amount they hold in currency. Illustrate and describe the impact of this new technology in the money market. What happens to the interest rate and quantity of money in equilibrium?

6. A financial institution's variable-rate gap (or simply *gap*) is the difference between the dollar value of the financial institution's variable-rate assets and the dollar value of its variable-rate liabilities.

   (a) (10 points) Do most banks have a positive or negative gap? Include in your explanation a description of banks most significant assets and liabilities.

   (b) (10 points) Describe the impact of an increase in interest rates on a bank with a gap as you describe in part (a).

7. Answer the following questions concerning *liquidity risk*.

   (a) (5 points) Define liquidity risk.

   (b) (10 points) Explain three ways banks attempt to manage liquidity risk.

8. (5 points) Describe the difference between liquidity crisis and a solvency crisis.

9. (10 points) Identify and explain three ways financial institutions or financial markets attempt to limit adverse selection.