

Do NOT write your name anywhere. (Canvas will tell me who turned in the exam.) Take pictures of your answers and use your own software or <https://pdfcandy.com/> to create a PDF for each answer which requires an upload. If it is large, resize it to A4. Upload that to Canvas. Upload each answer as a separate file with that question. Failure to follow directions will cost you one point.

You are not allowed to use your books, notes, the internet, or other people when taking this test. You can use the internet to access Canvas and to convert your answers to PDF files. Nothing else.

Failure to follow these directions will cost you 1 point. The test has 150 points (to be scaled up to 210 points) and is scheduled to take 75 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I have it set up to only give you 2.5 hours.

If you run out of time or lose your internet connection, you can do a second submission. You do NOT have to redo the questions you already did. I will be able to see every submission. If you have problems, you can always contact me via Zoom or e-mail. If you use Zoom, open it in a new tab or window.

1) (8 points each) For TWO of the following events, determine what happens to M1 and M2. Briefly explain your logic.

- A) You transfer \$100 from your checking account to your savings account.
- B) You buy one roll of toilet paper for \$50 using your credit card.
- C) You deposit \$75 cash into a money market account.

2) (12 points) Answer EITHER Part A OR Part B.

- A) What are two of the automatic stabilizers? Explain how they stabilize.
- B) Former Secretary of the Treasury, Paul O'Neill died recently in Pittsburgh. He said that our calculation of the national debt is too small. Explain his argument.

3) (12 points) Answer EITHER Part A OR Part B.

- A) Explain the difference between supply shocks and demand shocks.
- B) Explain how direct expenditure offsets could prevent expansionary fiscal policy from working. Do NOT discuss whether it is a weak or strong argument.

4) (12 points) Answer EITHER Part A OR Part B.

- A) Why is the classical SRAS curve vertical? Explain the logic.
- B) Give an example of an event which moves the SRAS but does not move the LRAS. Explain why it moves the SRAS and why it does not move the LRAS.

5) (12 points) For EITHER Ricardian Equivalence OR lags, explain why it could make counter-cyclical fiscal policy ineffective or counterproductive.

6) (14 points) Answer EITHER Part A OR part B.

- A) Define "adverse selection" and give an example of it. Briefly explain how your example fits the definition.
- B) Define "moral hazard" and give an example of it. Briefly explain how your example fits the definition.

7) (18 points) Answer EITHER Part A OR Part B.

A) Draw the money supply/money demand diagram. Currently, the GDP is falling greatly. Illustrate the effects of that on the graph. Explain why the curve(s) moved as drawn. What happens to the interest rate and the quantity of money?

B) Draw the money supply/money demand diagram. On March 16th, the Fed greatly decreased the discount rate. Illustrate the effects of that on the graph. Explain why the curve(s) moved as drawn. What happens to the interest rate and the quantity of money?

8) (18 points) Answer EITHER Part A OR Part B.

A) Use the MS/MD diagram to prove the Fed cannot control both the money supply and the interest rates. Explain how your graph shows that.

B) Use the MS/MD diagram to show a Keynesian Liquidity Trap. Explain why that means that expansionary monetary policy won't work.

9) (18 points) Answer EITHER Part A OR Part B.

A) Prior to COVID-19, the unemployment rate was about 3.5%. Draw the LRAS/SRAS/AD diagram for this situation. State how your diagram shows 3.5% unemployment. If COVID-19 had not attacked, what would have brought our economy back to full employment? Illustrate that on the graph and explain why the curve moved as drawn. What happens to GDP, inflation, and the unemployment rate?

B) Draw the LRAS/SRAS/AD diagram. What is one event which will cause demand pull inflation? Illustrate that event on the graph. Explain why the curve(s) moved as drawn. What happens to GDP, inflation, and the unemployment rate?

10) (18 points) Answer EITHER Part A OR Part B. Both parts look hard, but with a tiny bit of thinking are actually not hard at all.

A) One of the long-term problems caused by the large debt is crowding out. Explain how the debt causes crowding out and how it is a long-term problem. In Japan, the government debt of 238% and their 10-year government bonds were paying 0.01% interest on 4/20 (and less than that since then). Do you think that Japan has a problem with crowding out. Base your answer solely on the information I provide and what happens in the process of crowding out. Data from tradingeconomics.com.

B) Suppose that government spending is \$1000, transfer payments are \$1000-.1Y, and tax revenue is .2Y. Write the equation for either the budget deficit or the budget surplus. Briefly state how you got the equation and whether you did deficit or surplus. If GDP is \$6000, then how much is the deficit or surplus? (Make sure you tell me which you found.) If GDP at full employment is \$8000, then how much is the full employment deficit or surplus? (Make sure you tell me which you found.)