

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. The Excel file will be handed in via Canvas. Your name will only appear on a page of the file that has nothing else on it. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes, but you can have the full two hours. Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes.

Remember to fill out course evaluations.

1) (36 points) The file [exam4.xlsx](#) is the actual GDP by quarter for the USA from the BEA. The numbers are not seasonally adjusted. Seasonally adjust the data. Forecast the GDP for the rest of the year.

https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=3&isuri=1&select_all_years=0&nipa_table_list=404&series=q&first_year=2010&scale=-9&last_year=2018&categories=survey&thetable=x

2) (10 points) Answer EITHER Part A OR Part B.

A) Without drawing a graph, explain why the Fed cannot control both the money supply and the interest rate. They can only control one at a time.

B) Why does the central bank need credibility if doing discretionary monetary policy? Explain your logic.

3) (12 points) For EITHER of the following events, explain how the event affects the monetary base, the money multiplier and the money supply. Explain your logic.

A) The currency-deposit ratio increases.

B) The discount rate increases.

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

A) I put loans on both sides of a bank's balance sheets. Explain the difference between them.

B) We said that if the Fed buys \$1000 worth of bonds, the money supply will go up a lot more than \$1000. How does that happen?

5) (14 points) Answer EITHER Part A OR Part B.

A) If you were the chair of the Fed and you decided to use a rule, what rule would you use? Explain your logic.

B) What is the greatest advantage of a central bank using a rule rather than discretion? Explain your logic.

6) (16 points) Answer EITHER Part A OR Part B.

A) Draw the diagram with the fundamental exchange rate and the pegged exchange rate. Suppose the government puts the money supply to the left of where the lines cross. What will the government be forced to do? Explain the mechanism which forces them to do that.

B) Draw the diagram for supply/demand for foreign exchange with the €, euro, as the other currency. Put a peg at below the equilibrium. What will the government be forced to do? Explain the mechanism which forces them to do that.