

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 Moodle. 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 take the full 2 hours.) Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes.

1) (10 points) Answer EITHER Part A OR Part B.

A) What is the reason some economists prefer rules over discretion for monetary policy? Explain their logic.

B) Why is an independent central bank important? Explain your logic.

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

A) What is seigniorage? How does that help the government?

B) Does the equation for the growth rate of the debt/GDP ratio have the growth rate of real or nominal GDP? Why?

3) (18 points) Answer EITHER Part A OR Part B.

A) What are the three tools the Federal Reserve has to affect the money supply? For TWO of them, use

the equation  $M = BASE * \left[ \frac{1 + cu}{res + cu} \right]$

to explain how that tool affects the money supply.

B) Use the balance sheet to the right to determine how much excess reserves the bank has. Show all work and briefly explain what you did. In your test booklet, illustrate the effects of the bank's loaning out its excess reserves on the balance sheet. Briefly explain what you did. If nobody keeps cash on hand and the banks keep no excess reserves, then what will be the ultimate change in the money supply? Explain your logic and show all work.

Assets		Liabilities & Net Worth	
Cash	20	Checking accts	160
Deposits @ Fed	10	Savings accts	100
Loans	270	Miscellaneous	40

4) (20 points) Answer EITHER Part A OR Part B.

A) Suppose the government spending is \$500, transfers are \$1000 - 0.2\*GDP, interest payments on the debt are \$250, and the tax revenue is 30% of GDP. If the GDP is \$3500 and full-employment GDP is \$3000, then how much are the government deficit/surplus, the full-employment deficit/surplus, and the primary deficit/surplus? Show all work and briefly explain what you did. Do you think the government's fiscal policy is a good one or not? Explain your logic.

B) From an economic efficiency view, i.e. **not** fairness or any other criteria, is a tax on food or a tax on clothing better? Explain your logic. Would the marginal tax rate or the average tax rate play a more important roll in determining the distortions caused by the tax? Explain your logic.

5) (40 points) Use the data on the [Excel file](#) to forecast sales through May 2015. What percentage of the company's sales are normally done in January? How did you get that number? Seasonally adjust the sales for the first year.