

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. Therefore, expect to spend 1 minute for every 2 points. For example, a 10-point question should take 5 minutes. I will give you the full two hours. If you read this instruction, circle it.

1) (12 points) Answer EITHER Part A OR Part B.

A) What is the difference between the marginal and average tax rates? Which matters more to the distortions caused by taxes? Explain your logic.

B) What are automatic stabilizers? Why are they called that and how do they work?

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

A) If you were Ben Bernanke, would you choose to use rules or discretion for the monetary policy of the Federal Reserve? Explain why you would choose it and why you would not choose the other.

B) Explain why the money multiplier is greater than 1.

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

A) Suppose that the following equations describe the economy:  $G = 250$ ,  $TR = 300 - 0.2Y$ ,  $INT = 100$ , and  $T = 0.4Y$ . If GDP is 1000 and the full employment level of GDP is 1200, then what are the budget deficit/surplus, the primary budget deficit/surplus, and the full employment deficit/surplus? Show all work.

B) Suppose the unemployment rate in the USA is 4%. The government has a budget surplus of 1% of GDP. The primary budget surplus is 1.5% of GDP. The full employment budget is a deficit of 0.5% of GDP. Is this government doing good fiscal policy? Explain your logic. Make sure you explain the differences between the three types of deficits in your explanation.

4) (18 points) Illustrate EITHER the Fed selling bonds on the open market OR the Fed raising the required reserve ratio on the IS/LM/FE diagram. Explain why the curve(s) moved as drawn.

5) (40 points) Use Sheet "A" on the Excel file, [exam4.xls](#), to find the seasonally adjusted value of electricity usage if the electricity usage in November of 2003 had been 1600. If the annual electricity usage in 2004 were 9000, then what would you expect sales to have been in July of 2004? Forecast the sales for September of 2009. Show all calculations on the spreadsheet.