

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. You can have the full two hours.

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

A) Why is an independent central bank important for a healthy economy?

B) Why might it be best for the economy to have the central bank use discretion rather than rules?

2) (14 points) Answer EITHER Part A OR Part B.

A) A school of thought you are not studying is the Supply Side School. They conclude that all taxes should be kept to a minimum. What is the economic reason for this conclusion? Give a general explanation with a specific example which illustrates the problem.

B) What is the difference between marginal and average tax rates? Which matters most for determining how people behave? Explain your logic.

3) (16 points) Answer EITHER Part A OR Part B.

A) How do TWO of the Federal Reserve's tools affect the money supply. Use the formula

$$M = \frac{1 + cu}{cu + res} MB \quad \text{in your explanation.}$$

4) Use the balance sheet of a bank to explain how the Fed's buying \$1000 worth of bonds will cause the money supply to increase by more than \$1000. Explain what is occurring, why the entries are as you wrote, and the change in the money supply. Stop when the change in the money supply exceeds \$1000.

5) (20 points) Answer EITHER Part A OR Part B.

A) Suppose that the following equations describe the economy:  $TR = 300 - 0.2Y$ ,  $G = 250$ ,  $INT = 100$ , and  $T = 0.4Y$ . If GDP is 1100 and the full employment level of GDP is 1000, then what are the budget deficit/surplus, the primary budget deficit/surplus, and the full employment deficit/surplus? Show all work.

B) Suppose that a government had a surplus of \$50, a full-employment deficit of \$100, and a primary surplus \$10. How much are their interest payments? Is this government following good economic policies? Is the unemployment rate too high or too low? Explain your logic in all parts.

6) (40 points) Use Sheet "Exam 4" on the Excel file, [Exam4.xls](#) to answer this question. The dates refer to the first month of the quarter. Find the seasonally adjusted value of sales in the quarter which starts in October of 2003 if the unadjusted number had been 300. If the annual sales 2004 were 2000, then what would you expect sales to have been in the quarter starting July of 2004? Forecast the sales through the quarter starting April 2001. Show all calculations on the spreadsheet.