Wilfrid W. Csaplar Jr., Ph.D. Economics 350 Exam #4 2024/12/6

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 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) (12 points) Answer EITHER Part A OR Part B.
A) Suppose a government's budget has the following: Government spending is $1000; Transfers are $500 - .1*GDP; Interest on the debt is $200; and Tax revenue is .2*GDP. If GDP is $5000 and full-employment GDP is $6000, then how much are the actual budget deficit/surplus, full-employment budget deficit/surplus, and the primary budget deficit/surplus? Show all work and make sure you state what each number means. For example, "... means a deficit of ..." or "... means a surplus of ...".
B) Explain how a country with a budget deficit could still have the debt/GDP ratio decrease. Explain how that could happen. And why it would cause the ratio to decrease. (Hint: What else is in the equation which starts out $\Delta(B/Y)$ = ...?)

2) (12 points) Answer EITHER Part A OR Part B.
A) When we moved the S/D for foreign exchange diagram, most events moved both lines. Why is this the case?
B) What is the equation for absolute PPP? Why should it hold? Why doesn't it hold?

3) (12 points) Answer EITHER Part A OR Part B.
A) I just discovered that on March 15th of 2020 (when I was madly trying to learn how to teach online and not paying attention to the news), the Fed lowered the required reserve ratio to 0% because of COVID. How does that affect the monetary base, money multiplier, and the money supply? Explain your logic. If people keep 1% of their liquid money as cash (and 99% in their checking account). Then how much is the money multiplier? Show all calculations. https://www.federalreserve.gov/monetarypolicy/reservereq.htm
B) If you were the head of a central bank, would use a rule or discretion for doing monetary policy? Why? Explain your logic. If you chose a rule, make sure you tell me what the rule is.

4) (14 points) Answer EITHER Part A OR Part B.
A) Draw the graph of the fundamental exchange rate and the pegged rate. If the money supply is to the right of the equilibrium, what will automatically happen to bring us back to equilibrium? Explain why that occurs.
B) Draw the supply/demand for the US dollar, $, with the euro, €, as the other currency. Draw a peg set by the Fed, at an over-valued exchange rate. What will the Fed have to do to keep the peg there? Explain why they would have to do that.

5) (14 points) Answer EITHER Part A OR Part B.
A) The Neo-Classical School feels that counter-cyclical monetary policy cannot work. Use an appropriate diagram to explain their argument.
B) The Neo-Keynesian School feels that sometimes, counter-cyclical monetary policy cannot work. Use an appropriate diagram to explain their argument.

6) (36 points) Use the data on the Excel file to forecast sales through May 2025. What percentage of the company's sales are normally done in January? How did you get that number? Seasonally adjust the sales for all of the provided data.