

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 240 points (to be scaled down to 200 points) and is scheduled to take 120 minutes (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) Does a change in the exchange rate directly affect the IS or LM curve? Explain your logic.

B) Under what circumstances would a cold-turkey approach to fighting inflation be more logical than a gradual approach?

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

A) What is *seignorage* and why might developing countries use it?

B) When we had the formula for the growth rate of the debt-to-GDP ratio, we had $\Delta B - (B/Y) * \% \Delta Y$. Is ΔB the actual government deficit, primary deficit, or full employment deficit? Explain your logic.

3) (14 points) Answer EITHER Part A OR Part B.

A) Table 3 of your supplemental text is entitled **Proportions of Occurrences In Which Trends of Various DURATIONS Involved Cyclical Reversals of Business Activity**. Part of the table is recreated below. M1 increased in September and October of this year, but not in August. What would that tell you? Explain your logic.

Increasing Trends During Cyclical Contractions	Months of Duration							
	1	2	3	4	5	6	7	8
M1 Money Supply	0.25	0.36	0.43	0.56	0.60	0.75	0.75	0.75

B) Explain what *economic significance* means and why a variable needs *economic significance* to be a good indicator used in forecasting.

4) (16 points) Answer EITHER Part A OR Part B.

A) What are lags in monetary policy? Explain why they may cause the Fed to choose not to do counter-cyclical monetary policy.

B) What is meant by *government capital*? When we calculate the government deficit and debt, we ignore it. Why is this a bad practice?

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

A) Illustrate an increase in the GDP in Canada on the supply and demand for the US\$ vs the C\$. Explain why the curve(s) moved as drawn and which country's currency appreciated.

B) Draw the Short-run Phillips/Long-run Phillips Curve diagram for a situation where the expected inflation rate is 6% and the actual unemployment rate is 7%. Draw an unexpected increase in government spending when people expected the inflation rate to stay at 6%. Explain why the curve(s) moved as drawn and how you found the old and new points the economy was at.

6) (22 points) For EITHER the Neo-Classical (Real Business Cycle) OR the Neo-Keynesian explanation of the business cycle. What do they feel about the cyclicity of inflation and productivity? Explain how

they reach that conclusions for both variables. Which one does not agree with “generally accepted statistics”? Explain how they explain the apparent contradiction. You do NOT need to draw any graphs.

7) (24 points) Answer EITHER Part A OR Part B.

A) Use the spreadsheet labeled “Simple” in the Excel file [finalMU.xlsx](#) to do the *same value, same change, same percent change, 5-period moving average*, and 3-period weighted moving average to predict this student’s grades. Do NOT plot them.

B) Using the spreadsheet labeled “CPI” in the Excel file [finalMU.xlsx](#), calculate the Laspeyre’s style price index for all years using 2003 as your base year. Calculate the inflation rate for all of the years you can. Calculate the Paasche style price index for all years using 2003 as your base year. As we showed in the lab, the choice of base year is very important. One of the years would make a very bad choice. Which year is it and why would it make a bad choice?

8) (32 points) Answer EITHER Part A OR Part B.

A) Use the data on Sheet “Multi” on the file [finalMU.xlsx](#) to run a regression to predict sales of iPods as a function of the *iPod Price*, average monthly income of the customers (*Income*), the price of gasoline (*Gas Price*), and the price of a Sony Walkman (*Sony Price*). Are the results as a whole good? Explain your logic. Which variables are significant? Explain your logic. Test for multi-collinearity. **If you find it**, tell me how you know you have it. Correct it and tell me why you did what you did. **If you do not find it**, predict what the level of imports would be if the iPod Price was \$72/unit, the average monthly income was \$1000.00, the price of gasoline was \$2.00/gallon and the price of a Sony is \$66/unit.

B) Suppose $C_t = 100 + 0.8*(Y_t - T_t)$, $T_t = 0.25Y_t$, $I_t = 0.2(Y_t + Y_{t-1})$, $G_t = 500$, and $NX_t = 300 - 0.05Y_t$. Find GDP as a function of lagged and exogenous variables. Use Sheet 8B to forecast for 50 years assuming that GDP was 10,000 for each of the past two years. Plot GDP over time. What type of pattern is that? Explain your logic. What is the short-run government spending multiplier? Explain your logic.

9) (40 points) Answer EITHER Part A OR Part B.

A) EITHER seasonally adjust the data on spreadsheet “Seasonally” on [finalMU.xlsx](#) OR forecast through January of 2010 using the same data.

B) Use the data on Sheet “Auto” on [finalMU.xlsx](#) to run a regression which would predict the *Sales* based upon *Price*. Do the visual test for auto-correlation. State what you did. **If there is auto-correlation**, then explain how you know there is a problem. Correct the problem. Explain what you did. **If it does NOT exist**, then calculate on the spreadsheet what you would expect *Sales* to be if the *Price* is \$20/unit. Would you rely on this number? Explain your logic.

10) (48 points) Answer EITHER Part A OR Part B.

A) Draw the IS/LM/FE diagram, SRAS/LRAS/AD diagram, and real MS/real MD diagrams starting with a high unemployment rate. Illustrate the effect of the Fed’s buying bonds on the open market. Explain why the curve(s) moved as drawn. What happens to interest rates, price level, and real GDP? Assume that neutrality of money does not hold.

B) Draw the IS/LM/FE diagram, SRAS/LRAS/AD diagram, and real MS/real MD diagrams starting with unemployment rate at full employment. Illustrate the effect of the Canadian economy improving. Explain why the curve(s) moved as drawn. What happens to interest rates, price level, and real GDP?