

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

A) Reagan invented the "misery index." It was the inflation rate plus the unemployment rate. Implicitly, this implies that 8% inflation causes as much misery as 8% unemployment and 15% inflation causes as much misery as 15% unemployment. Explain the problem with this measure referring to the costs of inflation and the costs of unemployment.

B) Explain how *Tax-based Income Policies* (TIP) can reduce inflation. Also explain how they can increase inflation.

2) (16 points) Illustrate EITHER the event in Part A OR the event in Part B on the supply and demand for the US\$ measured in ¥. Explain why the curve(s) moved as drawn. Did the US\$ appreciate, depreciate, revalue, or devalue? Explain your logic.

A) Japanese interest rates increase.

B) US prices rise.

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

A) Suppose the current expected inflation rate is the actual inflation rate of 4% and people's expectations change to expecting a 7% increase in the money supply. Suppose the money supply actually increases 5%. Illustrate all of these events on the SRPC/LRPC diagram. Explain why the curve(s) moved as drawn. Explain how you found the starting and ending points.

B) Suppose that we have high inflation. If an economist recommends a rapid "cold-turkey" approach to fighting it, then what are they proposing? Which type of economist is that? Explain your logic. What is the potential drawback to this approach? Explain your logic.

4) (18 points) Illustrate EITHER the event in Part A OR the event in Part B on the IS/LM/FE diagram for the USA. Explain why the curve(s) moved as drawn.

A) The Canadian government spends more.

B) The US\$ appreciates.

5) (18 points) Run the regression using the data on Page #5 on [exam3.xls](#) to predict *Imports* as a function of *GDP*, *Price of the Good*, and the *Exchange Rate*. On the spreadsheet, calculate what you would expect the quantity imported if a *GDP* is \$20,000, the *Price* is \$9/unit, and the *Exchange Rate* is £2/\$. Check for multi-collinearity. **If you find it**, rerun the regression after correcting for the problem. Explain what you did and why you did it. **If you do not find multi-collinearity**, tell me how good the regression is as a whole and tell me which variables are statistically significant.

6) (20 points) Use the data on Page #6 on [exam3.xls](#) to run a regression which would predict the *Sales* based upon *Income*. Do the visual tests for BOTH heteroscedasticity and auto-correlation. **If there is heteroscedasticity**, do the formal test. **If there is auto-correlation**, then explain how you know there is a problem. What would you do to correct the problem? Explain what you would do without actually doing it. **If neither exist**, then calculate on the spreadsheet what you would expect *Sales* to be if the *Income* is \$20,000. Would you rely on this number? Explain your logic.