Write your name on the cover of the test booklet and on an otherwise blank page of the Excel file and nowhere else. Enclose this sheet with the booklet. The Excel file will be handed in via Moodle. 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. Therefore, expect to spend 1 minute for every 2 points. For example, a 14-point question should take 7 minutes. I can give you extra time, but not much.

1) (10 points) Answer EITHER Part A OR Part B.
A) Using the table on the back of this sheet, if you saw a decrease of the money supply of 1.5% while the economy is growing, what would you predict from this? Explain your logic.
B) In the table on the back of this sheet, the *Initial Claims, Unemployment Insurance* has an asterix beside it. The legend says that means it is *Inverted*. What does that mean and why is it inverted?

2) (16 points) Answer EITHER Part A OR Part B.
A) What is the *hysteresis* explanation of the natural rate of unemployment? Explain it.
B) The US$ has been depreciating lately. Who in the US likes this fact and who dislikes it? Explain your logic.

3) (18 points) Answer EITHER Part A OR Part B.
A) Is the *average duration of unemployment* a pro-cyclical, counter-cyclical, or acyclical variable? Is it a leading, roughly coincident, or lagging variable? Explain your logic.
B) What is meant by *conformity*? Why should a variable have it?

4) (20 points) Answer EITHER Part A OR Part B.
A) Which variable does the Keynesian model inaccurately predict during business cycles? What do they predict? What actually occurs? How do they reconcile the differences?
B) What is meant by *neutrality of money*? Does the Neo-classical School believe it? Explain their logic.

5) (24 points) Answer EITHER Part A OR Part B.
A) Some people say the debt is not a burden to future generations. Give two reasons why they are correct. What is the real problem with the debt?
B) Illustrate on the IS/LM/FE diagram an increase in government spending with Ricardian Equivalence. Explain why the curve(s) moved as drawn.

6) (26 points) Answer EITHER Part A OR Part B.
A) Draw a Short-Run Phillips Curve/Long-Run Phillips Curve diagram for a country which expects 5% inflation. Suppose that the central bank decides to only increase the money supply by 2%, but people expect it to increase by 6%. What will happen on the diagram? Explain your logic.
B) Draw the supply and demand for the US$ versus the British Pound, £. Show an increase in the interest rates in the USA. Explain why the curve(s) moved as drawn. Which currency appreciated? Explain your logic.

7) (26 points) Give EITHER the Keynesian explanation OR the Neo-classical School's (Real Business Cycle) explanation of the business cycle. Use the LRAS/SRAS/AD diagram in your explanation.

Answer THREE of the questions below on the spreadsheets (and in the blue-books when appropriate). They are worth 30 points each.

8) (30 points) Use the data on page 8 of the Excel ® spreadsheet to do calculate all of the following forecasts for the next 20 years. Plot the actual sales and all five forecasts on the same graph.
A) Same value
B) Same ratio
C) Same difference
D) 6-year moving average
E) 4-year weighted moving average

9) (30 points) Use the data on page 9 of the Excel ® spreadsheet to answer this question. Use this data to calculate the CMA, PSI, ASI, RSF, and TSF. What does the RSF for January of 2000 tell us? What does the TSF for June of 2000 tell us?

10) (30 points) Use the data on page 10 of the Excel ® spreadsheet to run a regression to determine the function which predicts the sales as a function of income and price. Do the test for multi-colinearity. If you find multi-colinearity, then solve the problem and re-run the regression. Explain how you know the problem existed and why your method solved it. If you did not find it, then predict how much you would expect to sell if the income was $100,000 and the price was $40/unit. How accurate do you think this prediction is? Explain your logic.

11) (30 points) Suppose the economy is described by $C_t = 0.8(Y_t + Y_{t-1})/2$, $I_t = 0.25(C_{t-1})$, $G_t = 400$, and $NX_t = 600 - 0.2Y_t$. Use this information to calculate the short-run multiplier. Suppose that for the past two years, GDP was 2000. Use the spreadsheet to use these equations to predict GDP for the next 20 years. If the government spending permanently changed to $500, then what is the long-run multiplier? Does that time-path show monotonic convergence, monotonic explosion, oscillating convergence, or oscillating explosion? Explain your logic.

Table 4
Proportions of Occurrences In Which Trends of Various MAGNITUDES Involved Cyclical Reversals of Business Activity

	Decreasing Trends During Cyclical Expansions — Percentage Decrease Larger Than								Increasing Trends During Cyclical Contractions — Percentage Increase Larger Than							
Primary Leading	*0.0*	*0.3*	*0.5*	*1.0*	*3.0*	*5.0*	*10.0*	*20.0*	*0.0*	*0.3*	*0.5*	*1.0*	*3.0*	*5.0*	*10.0*	*20.0*
M1 Money Supply	0.20	0.33	0.47	0.75	1.00	1.00	1.00	1.00	0.25	0.43	0.47	0.69	1.00	1.00	1.00	1.00
Yield Curve Index	0.67	0.86	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Index of Manufacturers' Supply Prices	0.27	0.28	0.29	0.31	0.37	0.40	0.53	0.71	0.42	0.42	0.42	0.50	0.53	0.56	0.59	0.67
New Orders, Consumer Goods	0.19	0.25	0.27	0.36	0.60	0.90	1.00	1.00	0.35	0.39	0.43	0.50	0.75	0.90	0.90	1.00
New orders, Core Capital Goods	0.13	0.15	0.16	0.17	0.31	0.53	0.80	1.00	0.30	0.31	0.35	0.35	0.47	0.67	0.80	1.00
Housing Permits	0.29	0.33	0.33	0.37	0.48	0.59	0.77	1.00	0.30	0.36	0.37	0.42	0.50	0.67	0.77	1.00
Mfg. & Trade Sales/Inventories	0.17	0.50	0.78	1.00	1.00	1.00	1.00	1.00	0.50	0.70	1.00	1.00	1.00	1.00	1.00	1.00
Vendor Performance	0.24	0.26	0.26	0.26	0.35	0.43	0.47	0.75	0.41	0.41	0.41	0.43	0.53	0.69	0.69	0.69
Stock Prices	0.20	0.20	0.22	0.24	0.45	0.53	0.71	1.00	0.31	0.33	0.33	0.36	0.50	0.71	0.91	1.00
Average Workweek, Mfg.	0.24	0.38	0.48	0.67	1.00	1.00	1.00	1.00	0.40	0.63	0.67	0.91	1.00	1.00	1.00	1.00
Initial Claims, Unemployment Ins.*	0.21	0.21	0.23	0.25	0.36	0.45	0.64	0.82	0.39	0.43	0.43	0.47	0.56	0.75	0.90	1.00
Change in Consumer Debt	0.34	0.50	0.63	0.91	1.00	1.00	1.00	1.00	0.30	0.67	0.71	0.83	1.00	1.00	1.00	1.00
Primary Roughly Coincident																
Nonagricultural Employment	0.18	0.59	0.63	0.77	1.00	1.00	1.00	1.00	0.50	0.91	0.91	1.00	1.00	1.00	1.00	1.00
Industrial Production	0.13	0.20	0.29	0.45	0.67	0.91	1.00	1.00	0.45	0.53	0.59	0.77	1.00	1.00	1.00	1.00
Personal Income, Less Transfer Pmts.	0.14	0.28	0.44	0.70	1.00	1.00	1.00	1.00	0.64	0.88	0.88	1.00	1.00	1.00	1.00	1.00
Manufacturing and Trade Sales	0.11	0.20	0.27	0.54	1.00	1.00	1.00	1.00	0.47	0.70	0.78	0.88	1.00	1.00	1.00	1.00
Civilian Employment/Population	0.16	0.41	0.47	0.90	1.00	1.00	1.00	1.00	0.33	0.60	0.90	1.00	1.00	1.00	1.00	1.00
Gross Domestic Product†	0.54	0.70	0.88	1.00	1.00	1.00	1.00	1.00	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Primary Lagging																
Average Duration of Unemployment*	0.16	0.16	0.16	0.20	0.30	0.37	0.83	0.91	0.38	0.38	0.38	0.59	0.83	1.00	1.00	1.00
Manufacturing and Trade Inventories	0.17	0.50	0.78	1.00	1.00	1.00	1.00	1.00	0.50	0.70	1.00	1.00	1.00	1.00	1.00	1.00
Commercial & Industrial Loans	0.18	0.24	0.31	0.45	0.83	1.00	1.00	1.00	0.36	0.45	0.59	0.71	0.91	1.00	1.00	1.00
Consumer Debt/Personal Income	0.20	0.33	0.43	0.50	1.00	1.00	1.00	1.00	0.30	0.48	0.56	0.77	1.00	1.00	1.00	1.00
Chg. In Labor Cost/Unit of Output	0.26	0.30	0.32	0.41	0.60	0.75	1.00	1.00	0.36	0.53	0.60	0.90	1.00	1.00	1.00	1.00
Composite of S-T Interest Rates	0.20	0.21	0.22	0.26	0.42	0.48	0.67	0.71	0.32	0.32	0.32	0.33	0.43	0.53	0.67	0.67

Note: All dollar-denominated series are in constant dollars. * Inverted. † Quarterly; magnitude shown in quarters.