

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. E-mail the Excel file to wcsaplar@bethanywv.edu. 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) (12 points each) For TWO of the following indicators, tell me if they are leading, coincident, or lagging indicators. Explain your logic.

- A) New building permits
- B) Interest rates
- C) Average duration of unemployment
- D) Consumer confidence

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

- A) Why do inflation and price level have different effects upon money demand?
- B) According to Friedman, what effect to  $Y_p$  and  $r_b$  have on money demand?

3) (18 points) Answer EITHER Part A OR Part B.

- A) What are the advantages of a diffusion index compared to a composite index? Which type of index is the CPI? Explain your logic.
- B) Illustrate the years 1992 - 1996 on the SRAS/LRAS/AD diagram. Explain how you know where to draw the lines.

4) (20 points) Answer EITHER Part A OR Part B.

- A) What two factors contribute to an increase in real GDP per capita grow? What can the government do to encourage those two factors to grow? Why would they have this effect?
- B) Why did the growth of potential GDP drop during the late 1970s? Why didn't the growth rate go back up during the 1980s when the situation reversed? Explain the logic for both parts.

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

- A) It is generally well accepted that the efficiency wage models hold for microeconomics. However, they may or may not apply to macroeconomics. Explain the *minimizing turnover* reason for the efficiency wage. Do you think that applies to macroeconomics? Why or why not?
- B) As I have said many times, different schools of thoughts have assumptions which are valid some of the time, but not other times. Do you feel the assumptions of the neo-classical school are valid now? Explain your logic.

6) (24 points) Answer EITHER Part A OR Part B.

- A) What is the problem with the Walrasian assumptions? Why is that a problem for our economic theory? Do you feel it is a major problem? Why or why not?
- B) What is the problem with the assumption of uncertainty's being statistically predictable? Why is that a problem for our economic theory? Do you feel it is a major problem? Why or why not?

7) (30 points) Of all of the explanations of the business cycle, which do you feel is the most accurate? Explain how that theory explains the business cycle. Why do you think that is particularly appropriate to the current business cycles? For one other theory, explain why you did not choose that theory.

Answer **THREE** of the questions below on the spreadsheets and in the blue-books. 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 four forecasts on the same graph.

- A) 4-year moving average
- B) Same ratio
- C) Same difference
- D) Same value

9) (30 points) Use the data on [page 9 of the Excel ® spreadsheet](#) to calculate the *Revised Seasonal Factor* (RSF). Economists use the RSF to calculate the seasonally adjusted value of a variable. Take the current level of sales and divide by the RSF to get the seasonally adjusted value. Using your work in the spreadsheet, calculate the seasonally adjusted sales for November of 2004 if the unadjusted sales were \$129.66.

10) (30 points) Use the data on [page 10 of the Excel ® spreadsheet](#) to run a regression to determine the function which predicts the purchases. Do the **quick** tests for multi-collinearity, autocorrelation, and heteroscedasticity. If done correctly, you should find exactly one problem. If you find multi-collinearity, then solve the problem and re-run the regression. Explain how you know the problem existed and why your method solved it. If you found autocorrelation, then solve the problem and re-run the regression. Explain how you know the problem existed and why your method solved it. If you find heteroscedasticity, then do the formal test. Explain how you did the formal test. (Use 1.5 for the cutoff value.)

11) (30 points) Suppose the economy is described by  $C_t = 0.6(Y_t - Y_{t-1}) + 0.8Y_{t-1}$ ,  $I_t = 0.5(C_t - C_{t-1})$ ,  $G_t = G_0$ , and  $X_t - M_t = 300 - 0.1Y_t$ . Use this information to calculate the short-run multiplier. Suppose that for the past two years, GDP was 2000 and government spending is 600. Use the spreadsheet to use these equations to predict GDP for the next 20 years. Does that time-path show monotonic convergence, monotonic explosion, oscillating convergence, or oscillating explosion? Explain your logic.