

Write your name on the cover of the test booklet, on the worksheet “name” of the computer file you submit to me and nowhere else. Enclose this sheet with the booklet. E-mail the Excel file to me at my Bethany account, [wcsaplar@bethanywv.edu](mailto:wcsaplar@bethanywv.edu). 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. Therefore, expect to spend 1 minute for every 2 points. For example, a 16-point question should take 8 minutes. However, you will be allowed the full two hours of the lab time.

1) (10 points) Do EITHER Part A OR Part B.

A) Given an example of a deterministic, institutional equation. Explain how you know it fits both categories.

B) Given an example of a deterministic, technological equation. Explain how you know it fits both categories.

2) Suppose the economy is described by the following equations:  $C = 10 + 0.8(Y-T)$ ,  $T = 0.25Y$ ,  $I = 0.25Y_{-1} + 0.4(Y - Y_{-1}) - 1000R$ , and  $X-M = 290 - 0.2Y$ .

A) (14 points) Find the reduced form of the equation for GDP. Show all work. What is the short-run government spending multiplier? Explain how you chose your value.

B) (18 points) Run a baseline scenario for government spending of 500, a real interest rate of 10%, and last years GDP of 2200. Run a scenario that shows a permanent increase in government spending of 10. Make sure your computer file shows your equations. Plot both lines.

C) (4 points) Calculate the long-run government spending multiplier for a permanent increase in government spending. State how you did the calculation.

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

A) What is meant by automatic stabilizers? Give an example of one and explain how it reduces the severity of the recession.

B) What is meant by counter-cyclical, discretionary, monetary policy? Explain how it affects the economy.

4) (18 points) Do EITHER Part A OR Part B.

A) On average, are post-war business cycles longer in duration than the pre-war business cycles. What is the economic reason for the change?

B) The two longest post-war expansions were in the 1960s and the 1980s respectively. What caused each of them to be so long?

5) (20 points) Which theory, of business cycles, do you feel is the most accurate? (You can choose any of the theories. It can be a short cycle like Kitchin or a long cycle like Kondratieff.) Explain why you feel it is accurate. For one of the other theories of business cycles, explain why it is not accurate.