

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (12 points) Answer EITHER Part A OR Part B.

- A) Why do we care if the velocity of money is unpredictable or constant?
- B) Explain why some economists feel that the velocity of money is constant.

2) (12 points each) For TWO of the following variables, determine if they are pro-cyclical, counter-cyclical, or acyclical. Explain your logic. Are they leading, lagging, or roughly coinciding variables? Explain your logic.

- A) Stock prices
- B) Inflation
- C) Duration of unemployment

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

- A) Why have business cycles become less severe since World War II? Give TWO reasons, one of which must be the tax system.
- B) What is the relationship between the liquidity of an asset and its expected return? Explain your logic.

4) (14 points) For EITHER *improving infrastructure* OR *building human capital*, explain how a government can do it and how it can help raise the rate of productivity growth.

5) (16 points) Explain EITHER the equation in Part A OR the equation in Part B.

- A) $M/P = L(Y, r, \pi^e)$. Treat M/P as one variable.
- B) $\pi = \Delta M/M - \eta_Y \Delta Y/Y$. Treat $\Delta M/M$ and $\Delta Y/Y$ each as one variable. Also explain $-\eta_Y$.

6) (20 points) Answer EITHER Part A OR Part B.

- A) Use the Solow Growth Model diagram to explain how faster population growth hurts a country's development. Explain why the curve(s) moved as drawn and how that hurts the country.
- B) Draw the per-capita savings function, a.k.a. Solow Growth Model, diagram. Draw an improvement in technology. Explain why the curve(s) moved as drawn. What happens to the capital/labor ratio and the output per worker.