

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 150 points (to be scaled up to 210 points) and is scheduled to take 75 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I can give extra time, but not much.

1) (12 points each) For TWO of the following variables, determine if it is procyclical, countercyclical, or acyclical. Also determine if it is leading, roughly coincident, or lagging. Explain your logic.

- A) Residential fixed investment
- B) Inventory investment
- C) Production

2) (12 points) Explain EITHER why the AD curve takes its shape OR why the LM curve takes its shape.

3) (12 points) Answer EITHER part A OR Part B.

- A) What evidence do some economists give for stating that the business cycle has NOT become less severe?
- B) The definition of a business cycle includes the phrase “recurrent but not periodic.” What does that mean?

4) (16 points) Answer EITHER Part A OR Part B.

- A) Why does it matter if the velocity of money is constant? Make sure you state the quantity theory of money’s equation in your answer.
- B) If we assume that the velocity of money is constant, then what are the long-term effects of an increase in the money supply? Explain your logic.

5) (18 points) Explain EITHER the equation in Part A OR the equation in Part B.

- A)  $M^d = f(P, Y, r, \pi^e, i^M)$
- B) demand for an asset =  $f(r, \text{risk}, \text{liquidity}, \text{time to maturity}, \text{wealth})$  where the first four terms refer to the properties of the asset itself

6) (18 points) Answer EITHER Part A OR Part B.

- A) Explain the neutrality of money using the real MS/real MD diagram.
- B) Illustrate the effects of an expected increase in taxes in the future on the IS/LM/FE diagram. Explain why the curve(s) moved as drawn. What happens to interest rates and real GDP?

7) (18 points) Answer EITHER Part A OR Part B

- A) Explain why the *unit of account* is normally also the *medium of exchange*. Why aren’t credit cards part of the money supply?
- B) For two of the functions of money, explain whether M1 or M2 does a better job of that. Explain your logic for both functions.

8) (32 points) Answer EITHER Part A OR Part B.

- A) Illustrate the effects of an increase in the price level on the real MS/real MD diagram and the IS/LM/FE diagram. Explain why the curve(s) moved as drawn. What happens to GDP and the interest rate?
- B) Illustrate the effects of an increase in the government spending on the real MS/real MD diagram and the IS/LM/FE diagram. Explain why the curve(s) moved as drawn. What happens to GDP and the interest rate?