

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 I have a class after your class.

- 1) (10 points) Explain EITHER the book's IS equation $r = \alpha_{IS} - \beta_{IS}Y$ OR the AD equation $Y = \alpha_{AD} - \beta_{AD}P$.
- 2) (14 points) For EITHER *stock prices* OR *new building permits*, determine if it is pro-cyclical, counter-cyclical, or acyclical. Explain your logic. Do you think that variable is a leading, lagging, or roughly coincident variable? Explain your logic.
- 3) (14 points) Illustrate EITHER the effects of the event in Part A OR the effects of the event in Part B on the real MS/ real MD diagram. Explain why the curve(s) moved as drawn. What happens to the real money supply and the real interest rate?
 - A) The Federal Reserve decreases the discount rate.
 - B) The price level increases.
- 4) (20 points) Answer EITHER Part A OR Part B.
 - A) Draw the LRAS/SRAS/AD diagram. Illustrate the effects of an increase in the price of oil. Explain why the curve(s) moved as drawn. What happens to the price level and real GDP?
 - B) Draw the IS/LM/FE diagram for the USA. Illustrate the effects an increase GDP of Canada. Explain why the curve(s) moved as drawn. What happens to the real interest rate and real GDP?
- 5) (42 points) For EITHER the event in Part A OR the event in Part B, illustrate the effects of the event on the SRAS/LRAS/AD diagram, IS/LM/FE diagram, and the real MS/real MD diagram. Explain why the curves moved as drawn. What happens to price level, interest rate, real GDP, and real money supply? Label the old and new values of those variables on the graphs.
 - A) The Federal Reserve sells bonds.
 - B) The future marginal productivity of capital increases.