



**AP[®] Macroeconomics
2005 Free-Response Questions
Form B**

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2005 AP[®] MACROECONOMICS FREE-RESPONSE QUESTIONS (Form B)

MACROECONOMICS

Section II

Planning Time—10 minutes

Writing Time—50 minutes

Directions: You have fifty minutes to answer all three of the following questions. It is suggested that you spend approximately half your time on the first question and divide the remaining time equally between the next two questions. In answering the questions, you should emphasize the line of reasoning that generated your results; it is not enough to list the results of your analysis. Include correctly labeled diagrams, if useful or required, in explaining your answers. A correctly labeled diagram must have all axes and curves clearly labeled and must show directional changes. Use a pen with black or dark blue ink.

1. Assume that a country's economy is currently at equilibrium along an upward-sloping short-run aggregate supply curve. Suppose that the country's central bank conducts an open-market sale of government bonds.
 - (a) Using a correctly labeled graph of the money market, show how the open-market sale of bonds will affect each of the following.
 - (i) Money supply
 - (ii) Interest rate
 - (b) Indicate whether the interest rate you identified in (a) (ii) is a real or a nominal rate.
 - (c) Under what condition will the nominal interest rate differ from the real interest rate?
 - (d) Using a correctly labeled graph of aggregate demand and aggregate supply, show the short-run effect of the open-market operation on each of the following.
 - (i) Real output
 - (ii) Price level
 - (e) On a correctly labeled graph of the Phillips curve, show how the open-market operation will affect the following in the short run. Use an arrow to show the direction of change.
 - (i) Unemployment rate
 - (ii) Inflation rate
 - (f) Identify a fiscal policy action that would offset the impact on real output and price level that you identified in (d).

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2. Labor productivity is output per unit of labor. An increase in labor productivity is a source of economic growth.
- (a) Identify two sources of increase in labor productivity.
 - (b) Assume that a country's economy is at full employment. Productivity has been rising. Using a correctly labeled graph of aggregate demand and aggregate supply, show the long-run effect of the growth in productivity on each of the following.
 - (i) Real output
 - (ii) Price level
 - (c) Assume that the economy produces only two goods, good X and good Y. Using a correctly labeled production possibility diagram, show the effect of the increase in labor productivity.
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3. Assume that an increase in government spending increases the budget deficit in Country A.
- (a) Using a correctly labeled graph of the loanable funds market, show the effect of the increase in Country A's budget deficit on the real interest rate.
 - (b) Given your answer in (a), what is the effect on business investment in Country A?
 - (c) The exchange rate between Country A's dollar and Country B's peso is determined in a flexible exchange market. Using a correctly labeled graph of the foreign exchange market for Country A's dollar, show how the interest rate change you identified in (a) affects the international value of Country A's dollar.
 - (d) Given your answer to (c), explain how the competitiveness of Country A's goods changes relative to Country B's goods.

END OF EXAMINATION