CollegeBoard
Advanced Placement Program

# AP® Macroeconomics
# 2010 Free-Response Questions

# MACROECONOMICS

**Section II**

**Planning Time—10 minutes**

**Writing Time—50 minutes**

**Directions:** You have 50 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 the United States economy is currently in long-run equilibrium.

   (a) Draw a correctly labeled graph of aggregate demand and aggregate supply and show each of the following.

   (i) The long-run aggregate supply curve

   (ii) The current equilibrium output and price levels, labeled as $Y_E$ and $PL_E$, respectively

   (b) Assume that the government increases spending on national defense without raising taxes.

   (i) On your graph in part (a), show how the government action affects aggregate demand.

   (ii) How will this government action affect the unemployment rate in the short run? Explain.

   (c) Assume that the economy adjusts to a new long-run equilibrium after the increase in government spending.

   (i) How will the short-run aggregate supply curve in the new long-run equilibrium compare with that in the initial long-run equilibrium in part (a) ? Explain.

   (ii) On your graph in part (a), label the new long-run equilibrium price level as $PL_2$.

   (d) In order to finance the increase in government spending on national defense from part (b), the government borrows funds from the public. Using a correctly labeled graph of the loanable funds market, show the effect of the government's borrowing on the real interest rate.

   (e) Given the change in the real interest rate in part (d), what is the impact on each of the following?

   (i) Investment

   (ii) Economic growth rate. Explain.

2. A drop in credit card fees causes people to use credit cards more often for transactions and demand less money.

   (a) Using a correctly labeled graph of the money market, show how the nominal interest rate will be affected.

   (b) Given the interest rate change in part (a), what will happen to bond prices in the short run?

   (c) Given the interest rate change in part (a), what will happen to the price level in the short run? Explain.

   (d) Identify an open-market operation the Federal Reserve could use to keep the nominal interest rate constant at the level that existed before the drop in credit card fees. Explain.

3. A United States firm sells $10 million worth of goods to a firm in Argentina, where the currency is the peso.

(a) How will the transaction above affect Argentina's aggregate demand? Explain.

(b) Assume that the United States current account balance with Argentina is initially zero. How will the transaction above affect the United States current account balance? Explain.

(c) Using a correctly labeled graph of the foreign exchange market for the United States dollar, show how a decrease in the United States financial investment in Argentina affects each of the following.

(i) The supply of United States dollars

(ii) The value of the United States dollar relative to the peso

(d) Suppose that the inflation rate is 3 percent in the United States and 5 percent in Argentina. What will happen to the value of the peso relative to the United States dollar as a result of the difference in inflation rates? Explain.

**STOP**

**END OF EXAM**