# AP® Macroeconomics
# 2006 Free-Response Questions

## The College Board: Connecting Students to College Success

## 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 operating at an equilibrium below full employment.
   (a) Draw a correctly labeled graph of aggregate demand and aggregate supply, and show each of the following.
      (i) Long-run aggregate supply
      (ii) Current equilibrium output and price level
   (b) Now assume a significant increase in the world price of oil, a major production input for the United States. Show on your graph in part (a) how the increase in the oil price affects each of the following in the short run.
      (i) Short-run aggregate supply
      (ii) Real output and price level
   (c) Given your answer in part (b), explain what will happen to unemployment in the United States in the short run.
   (d) Assume that the United States trades with Japan. Draw a correctly labeled graph of the foreign exchange market for the United States dollar. Based on your indicated change in real output in part (b), show and explain how the supply of the United States dollar will be affected in the foreign exchange market.
   (e) Given your answer in part (d), indicate what will happen to the value of the United States dollar relative to the Japanese yen.

2. Interest rates are important in explaining economic activity.
   (a) Using a correctly labeled graph of the money market, show how an increase in the income level will affect the nominal interest rate in the short run.
   (b) Using a correctly labeled graph of the loanable funds market, show how a decision by households to increase saving for retirement will affect the real market interest rate in the short run.
   (c) Suppose that the nominal interest rate has been 6 percent with no expected inflation. If inflation is now expected to be 2 percent, determine the value of each of the following.
      (i) The new nominal interest rate
      (ii) The new real interest rate

3. The unemployment rate is an important indicator of the health of the United States economy.
   (a) Assume that with the economy at full employment, the government implements an expansionary fiscal policy. How does the actual unemployment rate at the new short-run equilibrium compare with the natural rate of unemployment?
   (b) Assume that a significant number of workers are involuntarily changed from full-time to part-time employment. Explain how this will affect the number of people who are officially classified as unemployed.
   (c) Assume that the government reduces the level of unemployment compensation.
      (i) Explain how this affects the natural rate of unemployment.
      (ii) Using a correctly labeled graph, show how this affects the long-run Phillips curve.

**STOP**

**END OF EXAM**