

2021

AP<sup>®</sup>

 CollegeBoard

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# AP<sup>®</sup> Macroeconomics

## Free-Response Questions

### Set 1

**MACROECONOMICS**

**SECTION II**

**Total Time—1 hour**

**Reading Period—10 minutes**

**Writing Period—50 minutes**

**3 Questions**

**Directions:** You are advised to spend the first 10 minutes reading all of the questions and planning your answers. You will then have 50 minutes to answer all three of the following questions. You may begin writing your responses before the reading period is over. 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. 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. If the question prompts you to “Calculate,” you must show how you arrived at your final answer. Use a pen with black or dark blue ink.

You may plan your answers in this orange booklet, but no credit will be given for anything written in this booklet. **You will only earn credit for what you write in the separate Free Response booklet.**

1. Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.
  - (a) Is the Swedish capital and financial account in deficit, in surplus, or in balance? Explain.
  - (b) Draw a correctly labeled graph of short-run aggregate supply, long-run aggregate supply, and aggregate demand curves for Sweden, and show the current equilibrium real output, labeled  $Y_1$ , and the current equilibrium price level, labeled  $PL_1$ .
  - (c) Assume the United Kingdom decreases its imports from Sweden. On your graph in part (b), show the new equilibrium real output, labeled  $Y_2$ , and the new equilibrium price level, labeled  $PL_2$ , as a result of this change.
  - (d) As a result of the decrease in the United Kingdom's imports from Sweden, would policy makers in Sweden be more concerned about cyclical unemployment or inflationary pressures in the short run? Explain.
  - (e) If the Swedish central bank's goal is to return the economy to long-run equilibrium, what open-market operation should it use?
  - (f) The currency of the United Kingdom is the pound, and the currency of Sweden is the krona. Draw a correctly labeled graph of the foreign exchange market for the krona, and show the impact of the decrease in the United Kingdom's imports from Sweden on the value of the krona in the foreign exchange market.
  - (g) If the Swedish central bank's goal is to reverse the exchange rate change shown in part (f) by changing the interest rate, what open-market operation should it use?
  - (h) Explain how the open-market operation identified in part (g) would reverse the change in the exchange rate.

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**Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.**

2. Assume a country's economy is currently operating below full employment.
- (a) Identify a fiscal policy action the country's government could implement to restore full employment.
  - (b) Draw a correctly labeled graph of the loanable funds market, and show the effect of the fiscal policy action identified in part (a) on the equilibrium real interest rate.
  - (c) Based solely on the real interest rate change shown in part (b), what will happen to each of the following?
    - (i) Net exports. Explain.
    - (ii) The stock of physical capital. Explain.

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**Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.**

3. Flowerland is an open economy with a flexible exchange rate regime. The natural rate of unemployment is 5%, the frictional rate of unemployment is 4%, and the actual rate of unemployment is 7%.

(a) What is the numerical value of the cyclical rate of unemployment in Flowerland?

(b) Assume the foreign demand for lavender oil produced in Flowerland increases. What will happen to each of the following in Flowerland in the short run?

(i) Aggregate demand. Explain.

(ii) Cyclical unemployment.

The table shows the market basket quantities and prices of lavender oil and roses, the only two goods produced in Flowerland.

Goods	Quantity (in units)	2019 Price per Unit	2020 Price per Unit
Lavender oil	40	\$3	\$4
Roses	4	\$20	\$25

(c) Assume 2019 is the base year. Based on the data in the table, calculate the price index for year 2020 in Flowerland. Show your work.

(d) If nominal income in Flowerland increased by 20% from 2019 to 2020, will the standard of living of the average citizen of Flowerland increase, decrease, or stay the same from 2019 to 2020? Explain.

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**Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.**

**STOP**

**END OF EXAM**