2023

# AP® Macroeconomics

## Sample Student Responses and Scoring Commentary Set 2

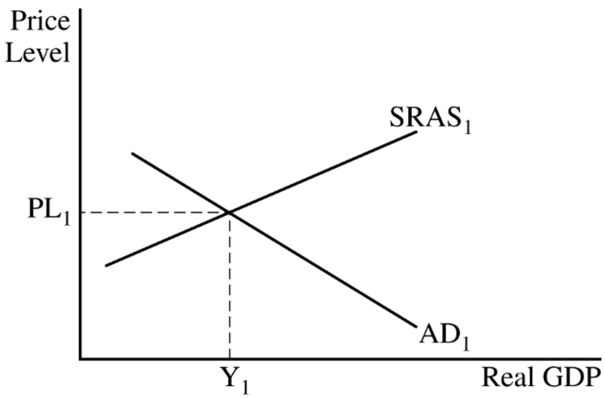
**Inside:**

Free-Response Question 3

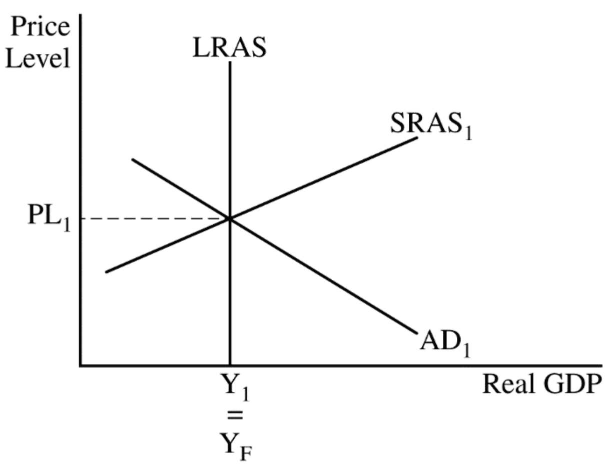
- ☑ Scoring Guidelines
- ☑ Student Samples
- ☑ Scoring Commentary

## Question 3: Short — 5 points

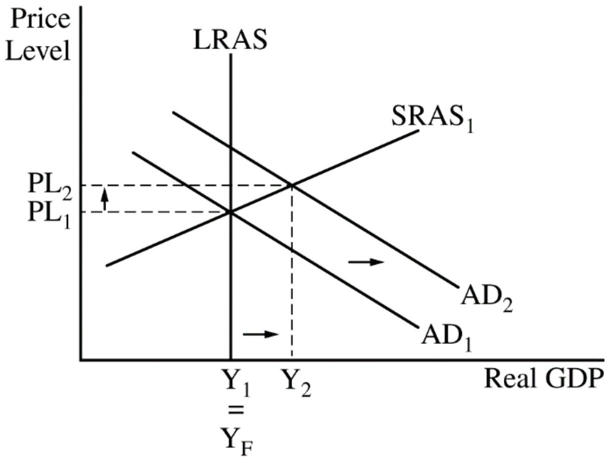
**(a)** Draw a correctly labeled aggregate demand–aggregate supply graph that shows $PL_1$ and $Y_1$ at the intersection of aggregate demand and short-run aggregate supply. **1 point**




For the second point, the graph must show a vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. **1 point**




**Total for part (a) — 2 points**

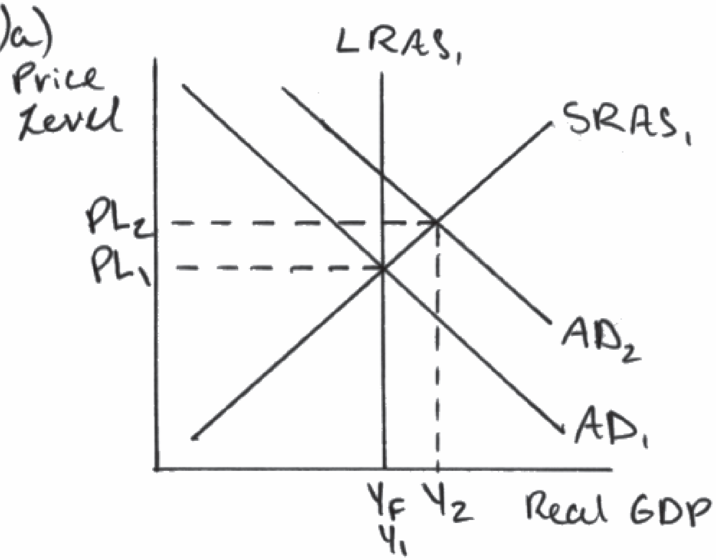
| | | |
|---|---|---|
| **(b)** | On the graph from part (a), show the short-run effect of the increase in consumer confidence as a rightward shift of the aggregate demand curve, resulting in an increase in real output, labeled $Y_2$, and an increase in the price level, labeled $PL_2$.  | **1 point** |
| **(c)** | State that the central bank would increase its administered interest rates or increase interest on reserves. | **1 point** |
| **(d)** | State that real output will decrease and explain that the increase in interest rates will decrease interest-sensitive spending (consumption, investment, or net exports), which decreases aggregate demand. | **1 point** |
| | **Total for question 3** | **5 points** |

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3

Begin your response to each question at the top of a new page.

3) a)




b) Visible on graph.

c) The central bank can increase its administered rates.

d) Decrease because increasing administered rates will cause more banks to deposit money at the central bank, causing a decrease in the money supply, which will cause AD to decrease.



Use a pen with black or dark blue ink only. Do NOT write your name. Do NOT write outside the box.

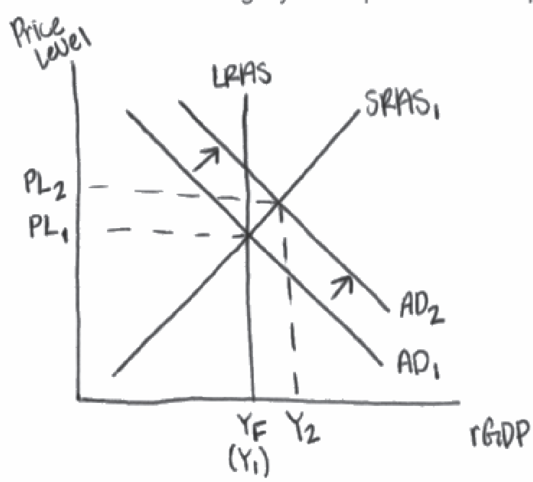
Q5361/06

Important: Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 ○ Question 2 ○ Question 3 ●

Begin your response to each question at the top of a new page.

a.)




c.) The central bank could increase taxes to achieve its goal of maintaining a stable price level at PL1.

d.) In the short run real output would stay the same because elements are sticky in the short run and flexible in the long run.

**Important:** Completely fill in the circle that corresponds to the question you are answering on this page.

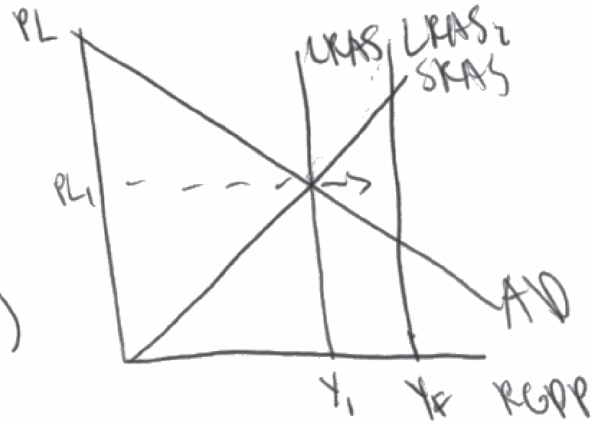
Question 1 ○ Question 2 ○ Question 3 ●

Begin your response to each question at the top of a new page.

a) i.

ii.

b)




c) Fiscal Policy

d) Increase b/c LRAS increased.



Use a pen with black or dark blue ink only. Do NOT write your name. Do NOT write outside the box.

0010500

Q5361/04

## Question 3

**Note:** Student samples are quoted verbatim and may contain spelling and grammatical errors.

### Overview

The question examined students' understanding of the aggregate demand-aggregate supply model and the effect of monetary policy on the economy. Students were told to assume that the economy of country Zen is in long-run macroeconomic equilibrium. In part (a) students were asked to draw a correctly labeled graph of the aggregate demand, short-run aggregate supply, and long-run aggregate supply curves and show (i) the current equilibrium real output and price level, labeling them $Y_1$ and $PL_1$, respectively, and (ii) the full-employment output, labeling it $Y_F$. In part (b) students were asked to show the short-run effect of an increase in consumer confidence on the graph in part (a) and to label the new equilibrium real output $Y_2$ and the new equilibrium price level $PL_2$. In part (c) students were told to assume that the banking system in Zen has ample reserves and that the central bank's goal is to maintain a stable price level at $PL_1$. Students were then asked, based on the change in the price level shown in part (b), to identify one specific monetary policy action the central bank would take to achieve its goal. Finally, in part (d), based on the monetary policy action identified in part (c), students were asked if real output would increase, decrease, or stay the same in the short run and to explain.

**Sample: 3A**
**Score: 4**

The response earned the first point in part (a) for drawing a correctly labeled aggregate demand–aggregate supply graph showing $Y_1$ and $PL_1$ at the intersection of AD and SRAS. The response earned the second point in part (a) for drawing a correctly labeled vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. The response earned 1 point in part (b) for correctly shifting the aggregate demand curve to the right and showing an increase in real output and an increase in the price level. The response earned 1 point in part (c) for stating that the central bank would increase its administered interest rates. The response did not earn the point in part (d) because it does not connect the decrease in aggregate demand to a decrease in interest-sensitive spending.

**Sample: 3B**
**Score: 3**

The response earned the first point in part (a) for drawing a correctly labeled aggregate demand–-aggregate supply graph showing $Y_1$ and $PL_1$ at the intersection of AD and SRAS. The response earned the second point in part (a) for drawing a correctly labeled vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. The response earned 1 point in part (b) for correctly shifting the aggregate demand curve to the right and showing an increase in real output and an increase in the price level. The response did not earn the point in part (c) because it states that the central bank should increase taxes. The response did not earn the point in part (d) because it incorrectly asserts that real output will stay the same.

## Question 3 (continued)

**Sample: 3C**
**Score: 1**

The response earned the first point in part (a) for drawing a correctly labeled aggregate demand–aggregate supply graph showing $Y_1$ and $PL_1$ at the intersection of AD and SRAS. The response did not earn the second point in part (a) because it did not draw a correctly labeled vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. The response did not earn the point in part (b) because it did not correctly shift the aggregate demand curve to the right and show an increase in real output and an increase in the price level. The response did not earn the point in part (c) because it does not state that the central bank would increase its administered interest rates or increase interest on reserves. The response did not earn the point in part (d) because it incorrectly asserts that real output will increase.