Question 1

11 points \((3 + 2 + 2 + 3 + 1)\)

(a) 3 points:
- One point is earned for a correctly labeled AS/AD graph.
- One point is earned for showing a vertical LRAS.
- One point is earned for showing current output and price level below full employment.

(b) 2 points:
- One point is earned for showing a leftward shift of the SRAS curve.
- One point is earned for showing that real output falls and price level rises.

(c) 2 points:
- One point is earned for stating that unemployment increases.
- One point is earned for explaining that the cause is the decrease in real output.
(d) 3 points:
- One point is earned for a correctly labeled graph.
- One point is earned for explaining that the fall in real income will cause the demand for imports to decrease.
- One point is earned for showing that the supply curve for dollars will shift to the left.

(e) 1 point:
- One point is earned for stating that the U.S. dollar will appreciate.
Write in the box the number of the question you are answering on this page as it is designated in the examination.

a) i) ii) 

Aggregate Demand

Aggregate Supply

Price Level

Long run aggregate supply

Short run aggregate supply

Current equilibrium output is lower than L.R.A.S. (which equals potential output), because the economy is below full employment. L.R.A.S. also equals the full employment level.

b) A.D.

S.R.A.S.

S.R. Aggregate Supply

Price Level

PRP

P0

GDP

GDP

Short run aggregate supply shifts to the left, b/c oil, a production input, increased in price. The resulting supply shock causes a decrease in output and an increase in price level. The new equilibrium price level (P1) is higher than the original level (P0), while the new output level (Q1) is lower than the old level (Q0).

c) Unemployment will increase in the short run because the new equilibrium GDP is lower than the old equilibrium GDP. This drop in output results in an increase in joblessness in the short run, since wages are sticky, and the self correcting mechanism will not alleviate the unemployment in the short run.
Write in the box the number of the question you are answering on this page as it is designated in the examination.

**d)**

Due to the drop in GDP in the U.S. economy, American consumers will demand less imports. As a result, they will supply fewer dollars in the foreign currency market. The inward shift of the $ supply curve results, moving $S_0$ to $S_1$, as shown.

**e)**

Because the currency market supply curve of the dollar shifts inward, the market value of the dollar relative to the yen increases from $P_0$ to $P_1$. The dollar thus appreciates, due to the new equilibrium point in the $ currency market.
(b) See graph. Since the price of oil, a production input, has increased, suppliers are less willing to produce because of a rise in production costs. This causes a "supply shock" causing the short-run aggregate supply curve to shift to the left. This results in a decrease of real GDP and an increase in the price level.

(c) Because of lowered production, more people will be out of jobs, therefore increasing the unemployment rate in the U.S.

(d) Because of a decrease in real GDP, the supply of the U.S. dollar will decrease. The decrease in supply of dollars in the foreign market is caused by the increase
in price level in the U.S. This prompts U.S. citizens to buy more foreign goods because they appear to be cheaper. In order to purchase foreign goods, the dollars must be converted to the foreign currency therefore decreasing the supply of dollars internationally.

(d) A decrease in the U.S. dollar depreciates the dollar's value. This means the U.S. dollar's value decreases relative to the Japanese Yen.
(a) (6) LEAST LIKELY

(b) Real output: decreases
    Price level: increases
    Wages: decreases

(c) Unemployment will most likely increase because more money will be spent for producing and buying oil.

(d) 

(e) The Japanese dollar would depreciate just as the American dollar would.
Overview

This question tested students’ understanding of aggregate economic analysis, including short-run equilibrium, full employment, the effects of an adverse supply shock, and the effect of aggregate economic changes on the foreign exchange market. The first part of the question required students to demonstrate a less-than-full-employment equilibrium. Part (b) asked students to draw a graph to show the effect of an increase in the price of oil on short-run aggregate supply and the equilibrium output and price level. Part (c) required an explanation of the connection between the changes in part (b) and unemployment in the short run. In parts (d) and (e), students were required to show the effect of a lower output level on the supply of dollars in the foreign exchange market and the resulting change in the dollar exchange rate.

Sample: 1A
Score: 11

The student received full credit.

Sample: 1B
Score: 8

The student lost 2 points in part (d): the first because the vertical axis is mislabeled, and the second because an incorrect reason is given for the leftward shift in the supply of dollars curve. The point in part (e) was lost because the student asserts that the dollar will depreciate.

Sample: 1C
Score: 5

The student lost 1 point in part (a) because the initial equilibrium is placed at full employment output. A point in part (c) was lost because the explanation for increasing unemployment is incorrect. No points were earned for parts (d) or (e).