2025

AP® Macroeconomics

Free-Response Questions

Set 1

MACROECONOMICS
SECTION II
TIME – 1 HOUR

Directions:

Section II has 3 questions and lasts 1 hour.

You may use the available paper for scratch work and planning, but you must write your answers in the free-response booklet. Label parts (e.g., A, B, C) and sub-parts (e.g., i, ii, iii) as needed. Use a pencil or a pen with black or dark blue ink to write your responses.

Include correctly labeled graphs, if useful or required, in explaining your answers. A correctly labeled graph 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.

A calculator is allowed in this section. You may use a handheld calculator that is approved for this exam or the calculator available in this application.

You may pace yourself as you answer the questions in this section, or you may use these optional timing recommendations:

It is suggested that you spend the first 10 minutes reading all of the questions and planning your answers. Then, it is suggested that you spend about 25 minutes on question 1 and about 12 minutes each on questions 2 and 3.

You can go back and forth between questions in this section until time expires. The clock will turn red when 5 minutes remain—**the proctor will not give you any time updates or warnings.**

Note: This exam was originally administered digitally. It is presented here in a format optimized for teacher and student use in the classroom.

1. Assume that the economy of Vortania is in long-run equilibrium.

A. Draw a correctly labeled graph of the short-run and long-run Phillips curves for the economy of Vortania, and label the long-run equilibrium point as P.

B. Assume that new residential construction projects are being implemented in Vortania.

i. Will real output in Vortania increase, decrease, or remain the same in the short run? Explain.

ii. Assuming no change in inflationary expectations, on your graph in part A, show the short-run effect of the new residential construction projects on Vortania's economy, labeling the new short-run equilibrium point as S.

C. Vortania and Rhodara are trading partners with flexible exchange rates. The currency of Vortania is the Vortanian crown (VTC), and the currency of Rhodara is the Rhodaran mark (RHM). Assume that Vortania's capital and financial account (CFA) balance is zero. Now assume that Vortania imposes new tariffs on imports from Rhodara. Draw a correctly labeled graph of the foreign exchange market for the Vortanian crown, and show the effect of the tariffs on the SUPPLY of the Vortanian crown and the international value of the Vortanian crown.

D. Based solely on the change in the international value of the Vortanian crown shown in part C, will Vortania's net exports increase, decrease, or remain the same in the short run?

E. Based on the change in net exports identified in part D, what will happen to each of the following in the short run?

i. The capital and financial account (CFA) balance in Vortania. Explain.

ii. Employment in Vortania

F. Assume the central bank of Vortania wants to return the Vortanian crown to its international value before the imposition of the tariffs. Would the central bank buy or sell Vortanian crowns in the foreign exchange market? Explain.

2. The economies of Country L and Country A are currently in short-run equilibrium at output levels below full employment. Both countries intend to use monetary policy to close their output gaps. Country L has a banking system with limited reserves, and Country A has a banking system with ample reserves.

A. What open-market operation would Country L implement to move the economy toward full employment in the short run?

B. What specific monetary policy action would Country A implement to move the economy toward full employment in the short run?

C. Draw a correctly labeled graph of the reserve market in Country A, and show the effect of the monetary policy action identified in part B on the policy rate.

D. Assume instead that no policy actions are taken in Country A and that the economy remains in short-run equilibrium at an output level below full employment. Will short-run aggregate supply in Country A increase, decrease, or remain the same as the economy self-adjusts in the long run? Explain.

3. The table provided shows the quantities and unit prices of shirts, bread, and pants, the only three goods produced in the country of Middleland in 2021 and 2022. Assume that 2021 was the base year.

	Shirts	Bread	Pants
Unit Prices in 2021	\$11	\$4	\$12
Unit Prices in 2022	\$10	\$5	\$15
Quantities Produced in 2021 and 2022	50	70	30

A. Was the real GDP in 2021 in Middleland greater than, less than, or equal to the nominal GDP in 2021? Explain.

B. Calculate the real GDP in Middleland in 2022. Show your work.

C. Assume that Middleland was in short-run equilibrium in 2022 and that POTENTIAL real GDP was \$1,150 in 2022. Draw a correctly labeled graph of the aggregate demand, short-run aggregate supply, and long-run aggregate supply curves for Middleland in 2022, and show each of the following.

i. The equilibrium real output and price level, labeled Y_1 and PL_1, respectively

ii. The full-employment output, labeled Y_F

D. Assume the marginal propensity to consume in Middleland is 0.8. Calculate the minimum change and state the direction of change in government spending required to close the output gap in the short run in Middleland. Show your work.

STOP

END OF EXAM