



• Name: _____

• Date: _____

ECON 301 Intermediate Macroeconomics

Final Exam

Spring 2024

INSTRUCTIONS:

- Please read all questions carefully before you begin answering.
- Answer all questions in the spaces provided on the question sheet.
- This quiz consists of 9 pages, including this one.
- There are a total of 5 problems with a total of 20 subquestions.
- This is a closed-book quiz. Please remove all materials from the top of the desk and take any necessary items from your bags before the exam begins.

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Problem 1. Definitions**(4 Points Each)**Select FIVE items on the list of items below, and provide a definition of the items that you chose.

- | | | |
|--------------------------|----------------------|------------------------|
| • Gross Domestic Product | • Discount Rate | • Potential Output |
| • Real Interest Rate | • Monetary Policy | • Interest Rate Parity |
| • Gini Coefficient | • The Phillips Curve | • Consumer Price Index |

1.A. Item #1: _____

1.B. Item #2: _____

1.C. Item #3: _____

Problem 1. Definitions (Continued)**(4 Points Each)**Select FIVE items on the list of items below, and provide a definition of the items that you chose.

- | | | |
|--------------------------|----------------------|------------------------|
| • Gross Domestic Product | • Discount Rate | • Potential Output |
| • Real Interest Rate | • Monetary Policy | • Interest Rate Parity |
| • Gini Coefficient | • The Phillips Curve | • Consumer Price Index |

1.D. Item #4: _____

1.E. Item #5: _____

Problem 2. True / False**(4 Points Each)**

Determine whether the following statements are either TRUE or FALSE. If you deem that the statement is TRUE, there is no need to justify your answer. If you deem that the statement is FALSE, you MUST justify your verdict by providing an explanation.

2.A. When the economy's unemployment rate is high, workers' nominal wages will tend to be high as well.

2.B. The primary factor that contributes to changes in the economy's long run growth rate is the accumulation of physical capital.

2.C. A recent college graduate who is currently looking for work will not be considered unemployed, since this is the first time they have entered the labor force.

Problem 2. True / False (Continued)**(4 Points Each)**

Determine whether the following statements are either TRUE or FALSE. If you deem that the statement is TRUE, there is no need to justify your answer. If you deem that the statement is FALSE, you MUST justify your verdict by providing an explanation.

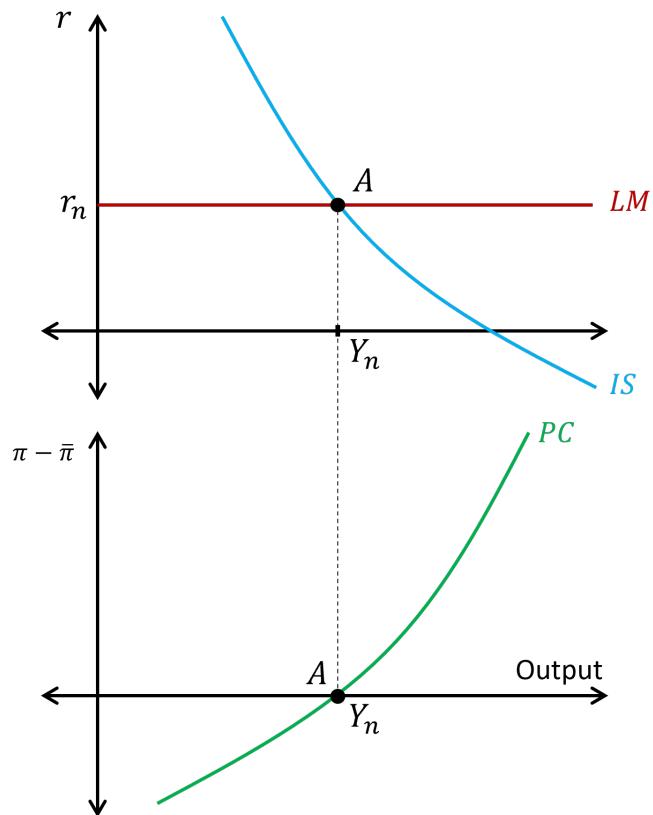
2.D. If an economy experiences high inflation, creditors (those who lent people their money) will be at a disadvantage, and debtors (those who borrowed money) will be at an advantage.

2.E. According to the uncovered interest rate parity, if domestic interest rates fall, the domestic currency will appreciate against foreign currencies.

Problem 3. Policy Interactions in the Medium-Run**(6 Points Each)**

Suppose that a closed economy is operating at its medium-run equilibrium labelled point A . Complete the following tasks:

- 3.A. Suppose that the government conducts expansionary fiscal policy (e.g. building new airports). Illustrate the short-run equilibrium, and label it point B .
- 3.B. Suppose that the Fed conducts contractionary monetary policy to return the economy to the medium-run equilibrium. Illustrate the resulting medium-run equilibrium, and label it point C .

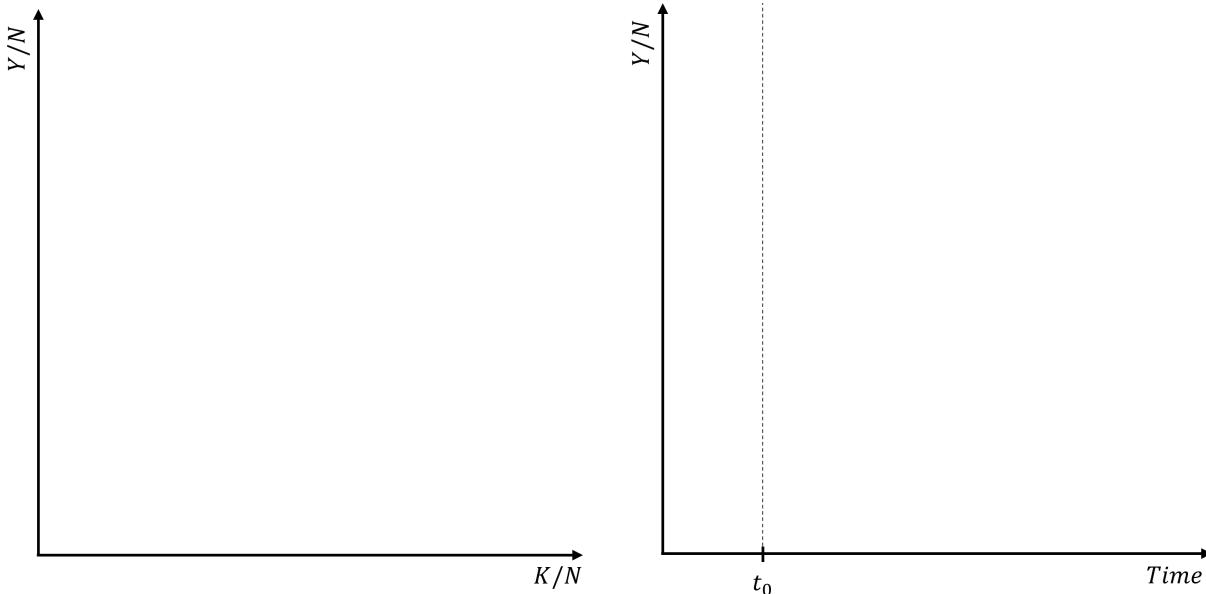


- 3.C. Explain in your own words why the Federal Reserve would conduct contractionary monetary policy as a response to increased government expenditure.

Problem 4. Long-Run Growth**(6 Points Each)**

Consider a closed economy with no technological progress and no population growth (assume an economy of one worker). We maintain our usual assumptions; capital depreciates at rate δ , production f exhibits constant returns to scale and decreasing returns to factors of production, and individuals save a fixed proportion s_L of their income.

- 4.A. In the empty graph on the left, plot and label the graphs for the economy's output, savings, required investment, and steady state output / capital level.
- 4.B. Continued from 4.A., illustrate the change in the economy triggered by an increase in the saving rate to s_H .
- 4.C. In the empty graph on the right, plot and label the evolution of the economy's output as it transitions between two saving rates ($s_L \Rightarrow s_H$).



- 4.D. It is estimated that many developed economies are exhibiting a lower-than-optimal saving rates. However, policies aiming to boost the saving rate in an economy is often not popular among its constituents. Why would these policies be unpopular?

Problem 5. The Goods Market**(6 Points Each)**

Consider a closed economy's market for goods and services where households' consumption is described as follows:

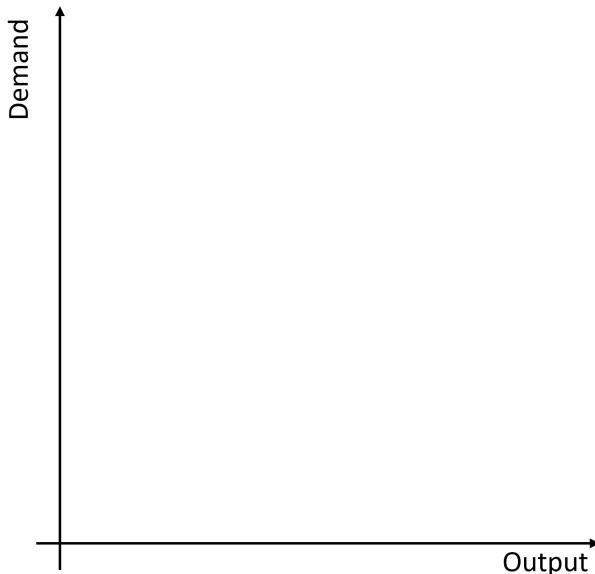
$$C(Y, T) = c_0 + c_1 \cdot (Y - T)$$

5.A. Identify the following terms in the households' consumption equation:

- c_0 : _____
- c_1 : _____

5.B. Suppose that $c_0 = 500$, and $c_1 = 0.3$, $T = 100$, $I = 2,500$, and $G = 1,300$. Find the equilibrium level of Y^* .

5.C. Plot the equilibrium in the goods market in the empty graph below:



- Original Score: _____
- Recovered Score: _____
- Original Date: _____
- Recovered Date: _____