



• Name: _____

• Date: _____

ECON 301 Intermediate Macroeconomics

Quiz #3

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 7 pages, including this one. There are a total of 5 problems with a total of 14 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.
- The estimated recovery rate for this quiz is 50%.

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Problem 1. Definitions**(5 Points Each)**Select FOUR items on the list of items below, and provide a definition of the items that you chose.

- Natural Rate of Unemployment
- Potential Output
- Reservation Wage
- De-anchoring of Expectations
- Phillips Curve
- Efficiency Wage

1.A. Item #1: _____

1.B. Item #2: _____

1.C. Item #3: _____

1.D. Item #4: _____

Problem 2. True / False**(5 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 unemployment level of the economy is low, its nominal wage will tend to be lower.

2.B. If the level of competition in the goods market decreases, the markup that firms can charge above the marginal cost of production will increase.

2.C. Stagflation refers to a situation in which the economy is facing both stagnation and deflation.

2.D. Once an economy reaches its medium run equilibrium, the inflation rate will always be zero.

Problem 3. Short Answers: The WS and PS Relations (10 Points Each)

Suppose that the Wage Setting (WS) and Price Setting (PS) relations in the economy are given as:

$$WS : W = P \times (1 - u)$$
$$PS : P = (1 + m) \times W$$

- 3.A. If the firms in the economy charge a markup of 10% above their marginal cost of production, what will be the natural rate of unemployment in this economy?

(Hint: Rearrange the WS and PS relations so that the real wage shows up on the left hand side.)

- 3.B. Suppose that the markup in the economy falls to 5%.

- Would the natural rate of unemployment increase or decrease?
(You do not need to calculate the natural rate of unemployment for this problem.)

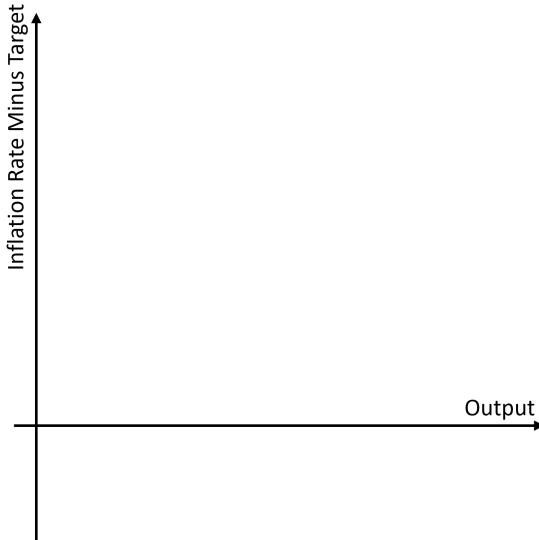
- Justify your answer to the question above.

Problem 4. Short Answers: The Phillips Curve**(10 Points Each)**

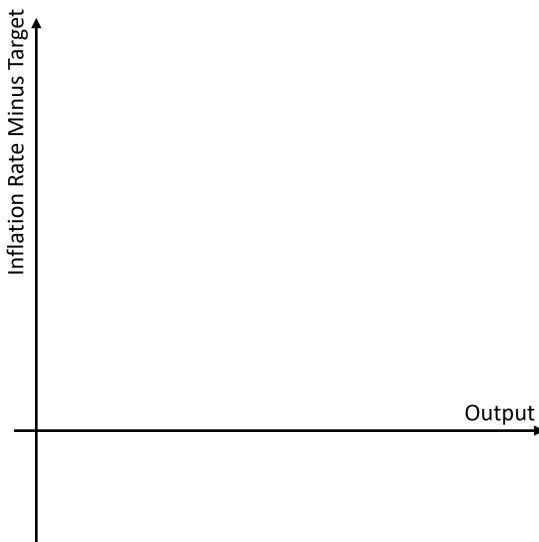
Suppose that the Phillips Curve (PC) in an economy is given as:

$$\pi - \bar{\pi} = \frac{1}{100} (Y - Y_n)$$

- 4.A. Plot the PC in the empty chart below, and calculate the unemployment rate in this economy if the current level of output is 50, the potential output is 45, and the target rate of inflation is 0%.



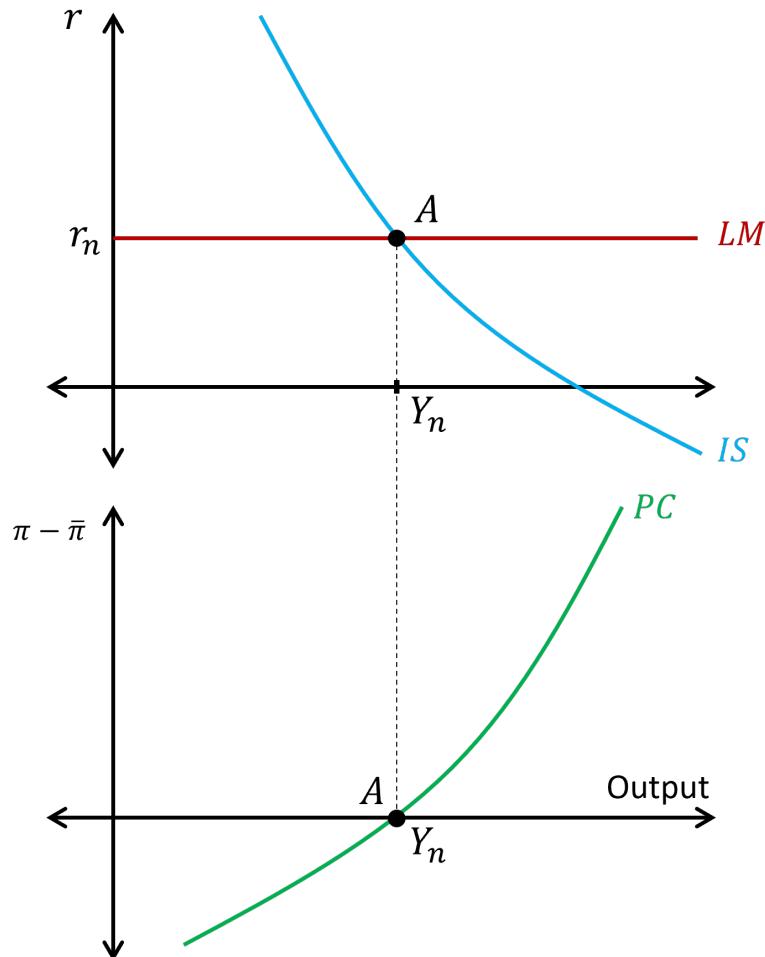
- 4.B. Suppose that the natural rate of unemployment increases in this economy. Plot both the original PC , and the updated PC' in the empty chart below:



Problem 5. Short Answers: The Short and Medium Run (10 Points Each)

Suppose that an economy is in its medium run equilibrium at point A. Complete the following tasks. You must label all graphs and equilibria that you find along the way.

- 5.A. Suppose that the price of raw materials increased substantially due to a supply chain disruption. Illustrate the short run equilibrium, and label it point B.
- 5.B. Illustrate what would happen in the medium run, and label it point C.



- Original Score: _____
- Recovered Score: _____

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