

ECON 3560/5040

Quiz #4 (Answers)

Last Name: _____, First Name: _____

Part A (6 points) Fill-in Questions

- (1) [2 points] The unemployment rate is calculated as the percentage of Labor Force that is unemployed
- (2) [2 points] Wage rigidity occurs when the real wage fails to adjust until labor supply equals labor demand. The resulting unemployment is called Structural Unemployment
- (3) [2 points] Efficiency Wage theories, another cause of wage rigidity, suggest that higher wages make workers more productive unemployed

Part B (14 points)

- (1) [6 points] **Wage Rigidity**

Assume that a country experiences a reduction in productivity. Use “Labor Demand(L^D)-Labor supply(L^S)” diagram to state and illustrate what the long-run impact of this on real wage and unemployment *if the real wage were rigid*

Since the real wage is stuck above the equilibrium level, real wage does not change in the long run. However, unemployment will rise because a reduction in productivity causes labor demand to fall

(2) [8 points] **Solow-Swan Model**

Answer the following questions using the Solow-Swan model with no population growth and no technological progress

- (a) [4 points] Suppose that two countries are exactly alike in every respect except that the citizens of country A have a higher saving rate than the citizens of country B. Which country will have the higher level of output per worker in the steady state? Illustrate graphically

Country A has a higher level of income per worker, $y_A^ > y_B^*$*

- (b) [4 points] (B) It rains so much in the country A that capital equipment rusts out (depreciates) at a much faster rate than it does in the country B. Which country will have the higher level of output per worker in the steady state? Illustrate graphically

Country B has a higher level of income per worker, $y_A^ < y_B^*$*