NOTE: THIS PROBLEM SET WILL BE DUE MONDAY, DEC. 2, 1996
Problem Set #8
14.02

Multiple Choice

1. As the unemployment rate rises,
a. the proportion of the unemployed finding a job decreases
b. the separation rate increases
c. the young and unskilled experience larger-than-average increases in un-
employment
d. all of the above
e. none of the above

2. Which of the following facts about wage setting is true?
a. Most workers in the US have their wages set by collective bargaining
b. Collective bargaining plays a more important role in Japan and Western
Europe than in the US
c. The minimum wage in the US is about 75% of the average wage
d. Wages for entry-level jobs at McDonalds are set by negotiation with the
company
e. all of the above

3. Which of the following would increase the natural level of employment?
a. a decrease in the markup of prices over costs
b. an increase in unemployment benefits
c. an increase in the actual unemployment rate
d. all of the above
e. none of the above

4. In the graph the real wage on the vertical axis, and the unemployment
rate on the horizontal, the wage-setting relation will appear as
a. a vertical line
b. a horizontal line
c. an upward sloping line
d. a downward sloping line
e. a curve that first slopes upward, then downward

5. Which of the following are considered "out of the labor force"?
a. the unemployed
b. those temporarily laid-off who will be recalled soon
c. those who worked full-time, but in a family business
d. those not working because they are raising children
e. all of the above

6. In the aggregate supply relation, an increase in current output causes
a. an increase in unemployment
b. an increase in the current price level
c. an increase in the price level expected next year
d. an increase in the labor force
e. an increase in the mark-up over labor costs

7. Which of the following assumptions would make monetary policy more effective in changing GDP in the short run?
a. a very small marginal propensity to consume
b. investment is not very sensitive to the interest rate
c. a very steep IS curve
d. a very steep AS curve
e. a very flat AS curve

Short Questions

8. Consider the standard wage-setting and price-setting equations.
a. Draw the two curves on a graph with unemployment on the horizontal axis and real wages on the vertical axis. Label the natural rate of unemployment.
b. What effect does an increase in the minimum wage have on the equilibrium unemployment rate? Do real wages change? Explain your answers in words and graphically.
c. Ignoring the minimum wage increase, assume that the government decides to abolish the Department of Justice, thereby eliminating all enforcement of antitrust (anti-monopoly power) laws. Show the effect of such a decision in the wage- and price- setting context. Do you expect a change in the real wage and/or equilibrium unemployment rate?
d. Assume that the government passes both laws simultaneously. Draw the effects in the wage- and price-setting context. Is the resulting change in the equilibrium unemployment rate ambiguous? Why?

9. True, False or Uncertain. Explain. When output is less than its natural level, the unemployment rate is greater than the natural unemployment rate.

10. For each of the following events, state which curve or curves are affected initially (IS, LM, AD and AS) and in which direction they will initially shift:
a decrease in government spending
b. an increase in unemployment benefits
c. an expansionary monetary policy

Long Questions

11. This is a challenging question. Using the Economic Report of the President, find two series: 1.) the civilian unemployment rate and 2.) total private

average hourly earnings (in real terms, not in current dollars). Plot the relationship between the two series (put the unemployment rate on the x-axis and real wages on the y-axis) for the years 1980-1994. Does the observed relationship between unemployment and real wages for 1980-1994 agree with that of the wage-setting curve? Offer some reasons for your answer. Note: you may want to think of this question using the correlation discussion in Chapter 4.

12. Consider the following equations:

$W = P_t^e F(u, z)$

$P_t = W(1+u)$

$Y = AN$

a. From the two equations above, describe the dependence of price on expected price. Explain.

b. Write down the equation for the aggregate supply (AS) curve. Be explicit about the assumptions you make regarding prices. In other words, explain how expectations of prices may be formed on current or past information of prices. Additionally, provide intuition for the upward sloping nature of the AS curve.

c. Explain why the AD curve described in the book is downward sloping. That is, why is there a negative correlation between output and the price level in the aggregate demand curve?

d. While Ronald Reagan was president, he took several effective steps to reduce union power including firing all striking Air Traffic Controllers. Show the effect of such actions in the AS-AD context. If all else is unchanged, what happens to the long-run equilibrium levels of output and prices? Label this equilibrium point A.

e. Given the information in part d., has the natural rate of unemployment changed? If so, in which direction?

13. During his first term, President Reagan lowered taxes significantly. You read about this in Chapter 12 and 13 in the discussion of "twin deficits."

a. Draw the short-run effect of his tax decrease in the AS-AD framework. Label this short-run equilibrium point A.

b. What happens to long-run equilibrium output and prices? Label this point B.

c. Show the short-run effects of the tax decrease in the ISLM. Label this equilibrium point A (this should correspond to point A in part.a)

d. Finally, show the long-run effects of the tax decrease in the ISLM. Label this equilibrium point B.