Homework 6

ECON 101

Summer I 2016

Name: ______________________________

ONYEN: ______________________________

PID: ______________________________

This (optional) homework is due on **June 14** by **11AM**. Show work for all questions that require it (including multiple choice questions), attaching extra sheets as necessary. Multiple choice answers should be bubbled in on a scantron. For the short answer section, write legibly and make sure to box final answers. The total number of points available on this assignment is **40**.

Multiple Choice [2 pts each]

1. When the economy goes into a recession, real GDP ________________and unemployment ________________.
   (a) rises; rises
   (b) rises; falls
   (c) falls; rises
   (d) falls; falls

2. A change in the expected price level shifts
   (a) the AD curve.
   (b) the short-run AS curve, but not the long-run AS curve.
   (c) the long-run AS curve, but not the short-run AS curve.
   (d) both the short-run and the long-run AS curve.

3. An increase in the AD for goods and services has a larger impact on output ________________and a larger impact on the price level ________________.
   (a) in the short run; in the long run
   (b) in the long run; in the short run
   (c) in the short run; also in the short run
   (d) in the long run; also in the long run

4. Sticky wages and prices
    (a) reduce the impact of negative shocks.
    (b) increase the impact of positive shocks.
    (c) have no effect on the impact of negative shocks.
    (d) offset the impacts of positive shocks.
5. Imagine that a government starts out with a budget surplus. If in the next period the government temporarily runs a budget deficit, what would you expect to happen to aggregate demand?
    (a) AD would increase.
    (b) AD would lie at the natural growth of output.
    (c) AD would be unchanged.
    (d) AD would decrease.
6. If the central bank wants to expand aggregate demand, it can ________________the money supply, which would ________________the interest rate.
    (a) increase; increase
    (b) increase; decrease
    (c) decrease; increase
    (d) decrease; decrease
7. Which of the following is an example of an automatic stabilizer? When the economy goes into a recession,
    (a) more people become eligible for unemployment insurance benefits.
    (b) stock prices decline, particularly for firms in cyclical industries.
    (c) Congress begins hearings about a possible stimulus package.
    (d) the Fed changes its target for the federal funds rate.
8. When consumers are very reluctant to spend in a recessionary environment, the government's most effective strategy is to
    (a) increase spending through bond financing.
    (b) decrease income taxes.
    (c) decrease corporate taxes.
    (d) do nothing - the economy will self-correct in the short run.

9. Consider Figure 1.

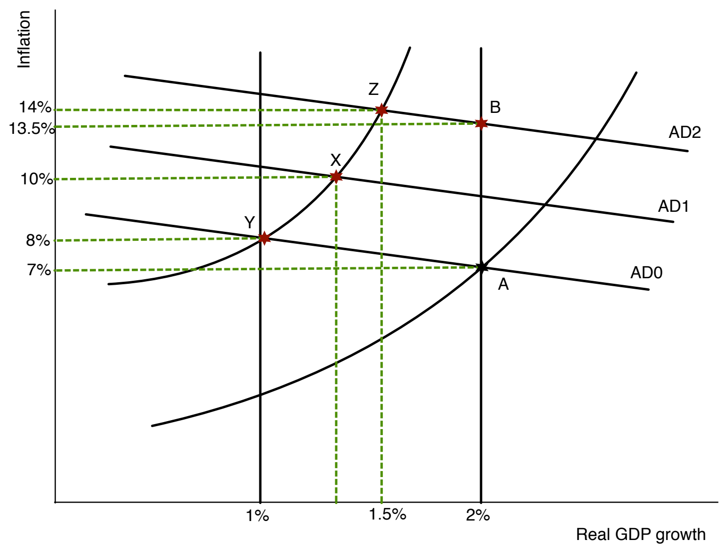

Figure 1: Real Shock

If after a real shock the economy is operating at point Y, then, in the absence of crowding out, fiscal policy that shifted $AD0$ to $AD2$ would move the economy to point

(a) A

(b) B

(c) Z

(d) X

10. If the government wants to contract aggregate demand, it can ________________government purchases or ________________taxes.

(a) increase; increase

(b) increase; decrease

(c) decrease; increase

(d) decrease; decrease

Short Answer

1. Use Figure 2 to answer the questions that follow. Assume that firms are changing the price of final goods at the same rate as inflation.

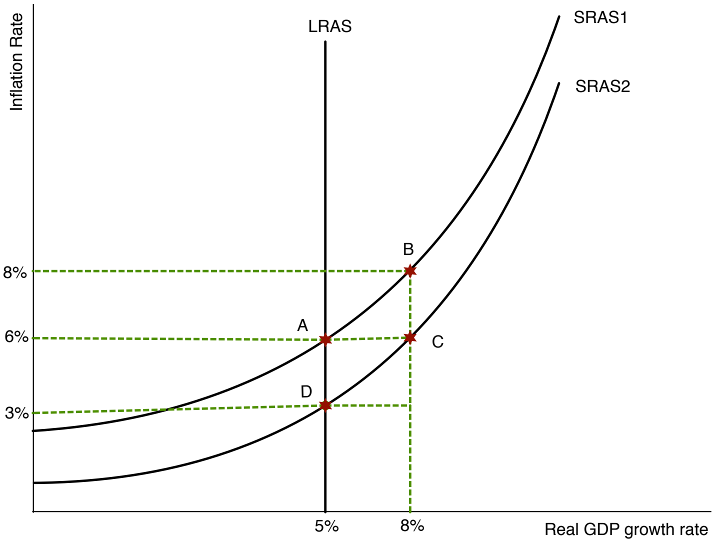

Figure 2: SRAS

   (a) If nominal wages are growing at 3% annually, then at point D how fast are real wages growing? **[2 pts]**

   (b) If nominal wages are growing at 3% annually, then at point C how fast are real wages growing? **[2 pts]**

   (c) If nominal wages are growing at a constant rate, what happens to firm profits between points D and C? How will the change in profits affect the growth rate of output? **[2 pts]**

   (d) Assume we are at point C, and workers are at the point where they can renegotiate wages. In order to maintain the same standard of living that they had at point D, what wage growth rate will they negotiate? **[2 pts]**

   (e) Will the economy remain at point C? Why or why not? If the point does change, what will the new point be? **[2 pts]**

2. Suppose that an economy has a natural growth rate of 2%. Moreover, the central bank in the country has perfect control over the money supply and increases it by 4% every year. Assume spending is such that the velocity of money is constant over time and that the economy is currently at its long-run equilibrium.

   (a) Draw a clearly labeled dynamic AS-AD diagram that shows the long-run equilibrium point, as well as the economy's current growth rate of real GDP, inflation, and expected inflation. Label this point E_0. Be sure to include both the short-run and long-run aggregate supply curves. **[2 pts]**

   (b) Now, suppose that the stock market declines sharply, reducing consumers' wealth. As a result, consumers spend at a rate that is 4% lower than before. Assume this change is permanent. Does this affect aggregate demand, short-run aggregate supply, or long-run aggregate supply? Explain why. **[2 pts]**

(c) Show this change graphically. Assume that neither the central bank nor the federal government enact any policies to counteract this change. Label the short-run equilibrium point A and the long-run equilibrium point E_1. What is the inflation rate in the short run if this change in consumer spending caused real GDP growth to decrease to -1%? What will be the long-run real GDP growth rate and inflation rate? **[2 pts]**

(d) Explain why the short-run growth rate of output is different from the long-run growth rate of output. What causes the economy to move from point A to point E_1? **[2 pts]**

(e) Suppose the central bank decides to intervene while the economy is at point A in order to get the economy back to point E_0. Regardless of the policy pursued, show how this policy would be reflected graphically. Specify what the growth rate of the money supply must be in order for this policy to achieve its goal. **[2 pts]**

3. What topics or questions gave you the most trouble on this homework assignment or the class material it encompassed?