ECON 312 - Exam # 2

Name:

1 True, False or Uncertain

Answer each of the following questions either true, false, or uncertain and explain your answer. Because the explanation is the most important part of your answer, you must provide an explanation for each question to receive full credit. Point values and approximate time for answering the question are shown for each question.

1. In an LP/SP model with adaptive expectations, an increase in the growth rate of nominal GDP from \( x_1 \) to \( x_2 \) moves the economy from \( E_1 \) to \( E_2 \) with no change in the growth rate of real GDP (\( y \)). (5 points, 5 minutes)

2. Based on the LAS/SAS/AD Model shown below, the inflation rate at long-run equilibrium point \( E_2 \) is higher than the inflation rate at long-run equilibrium point \( E_1 \). (5 points, 5 minutes)
3. Suppose that the domestic price level \((P)\) in an economy grows at 5% per year over a five year period and the foreign price level \((P_f)\) grows at 1% per year over the same five year period. The PPP model of exchange rate determination predicts that the nominal exchange rate \((e')\) will fall over this period. (5 points, 5 minutes)

4. For the \(SP/LP\) model shown below, \(p = 5\) at point \(B\), \(p = 5\) at point \(C\) and \(p = p^e = 5\) at point \(A\). (5 points, 5 minutes)

5. According to the model of real wage and employment determination presented in chapter 7, a decrease in the price level decreases labor demand. (5 points, 5 minutes)
6. A decrease in the aggregate price level shifts the $AD$ curve to the left. (5 points, 5 minutes)

7. In a small open economy with fixed exchange rates, monetary policy is ineffective. (5 points, 5 minutes)
2 Analysis

Answer the following questions in the space provided. Use graphs or equations to illustrate your answers where appropriate.

8. Consider a closed economy that can be described by the macro model developed in class. In each case below, use this model to illustrate the effects of the following economic events. Assume that the economy was in long run equilibrium in period 0, the initial period of analysis. Also, assume that the inflation rate in period 0 was 0%.

8.a In period 1 the central bank in this economy reduces the growth rate of the nominal money supply \( m^s = \frac{\Delta M^s}{M^s} \) by 6%. This policy change reduces the growth rate of nominal GDP \( \Delta x \) by 3%. Show the effects of this policy change on the level of interest rates \( r \) and the level of real GDP \( Y \) in the economy. Label both the original long run equilibrium values of interest rates \( r_o \) and real GDP \( Y_o \) and the values of these variables after the policy change. (10 points, 5 minutes)

8.b What was the growth rate of the nominal money supply in period 0? Explain your answer. (5 points, 5 minutes)
8.c The decline in $x$ was half the size of the decline in the growth rate of the nominal money supply \(m^s = \frac{\Delta M^S}{M^S}\). Discuss the factors that determine the size of $x$ relative to the size of $m^s$. (10 points, 5 minutes)

8.d Suppose that this economy is a large open economy with flexible exchange rates, and not a closed economy. How would this change your answer to question 8.a? (10 points, 5 minutes)

8.e Show the effects of the decline in the growth rate of the nominal money supply from 8.a on the price level and the level of employment in period 1. Show the initial values for the aggregate price level \(P_o\), aggregate employment \(N_o\), real GDP \(Y_o\) and the real wage \(W_o/P_o\) on your graph. (10 points, 5 minutes)
8.f Show the effects of this decline in the growth rate of the nominal money supply on the inflation rate in period 1. Calculate the growth rate of real and nominal GDP in period 1. (10 points, 5 minutes)

8.g Explain what will happen to the growth rate of real and nominal GDP and the actual and expected inflation rates over the next several periods in this economy. Calculate the values of $x$, $y$, $p$ and $p^e$ when the economy reaches long run equilibrium again. (10 points, 5 minutes)