1. During the late 1990’s, the American economy experienced unprecedented growth rates.

a) Use an AS – AD graph to depict the equilibrium in the US in 1998.

There will be relatively high output and low unemployment (in contrast to the natural state).

If this economy is left to its own means, what would happen to prices and output in the medium run? Use a graph to justify your answers.

Prices would rise and output would fall as the aggregate supply curve shifted up to \( AS_{inf} \) in the graph below (this is the self-correcting mechanism).
c) Suppose that, in 1998, the Federal Reserve began selling bonds. How would this affect the U. S. economy (use a graph)? Would you argue that it would be better for the Fed to do this or leave the economy alone (as in part b)? Justify your answer.

If the Fed sold bonds, this would increase interest rates, thereby lowering investment and aggregate demand to $AD'$ in the graph below. Output would fall back to the natural rate if this interest rate change were well-designed. Thus, the economy would achieve its medium-run equilibrium without inflation. Overall, this is probably a policy which leaves the economy better off (it goes where it was headed anyway, but avoids inflation).

2. Question 2 on p. 178 of Blanchard.

a. This statement is true when applied to the classical Phillips curve (where high unemployment leads to low inflation and vice versa). For the Expectations Augmented Phillips Curve, this statement is not exactly true. Under the EAPC, an increase in unemployment will cause inflation to fall but it still may be high. For example, at an unemployment rate of 5%, inflation might fall from 10.5% to 10%, which is still a high rate of inflation.

b. Eventually, expansionary fiscal policy will reach its limits and it will no longer have an impact on the unemployment rate. If fiscal policy pushed unemployment below the natural rate, the self-correcting mechanism will begin and it will push unemployment back up toward the natural rate. Even expansionary fiscal policy can not keep unemployment below the natural rate in the medium run, particularly when expectations adapt rapidly.
3. Question 3 on p. 199 of Blanchard

a. The natural rate of unemployment is 5%.
b. If the unemployment rate, this period and last, is stable at 5% then from Okun’s Law we can conclude that output growth is 3%. If we sum output growth with the inflation rate, we will obtain the growth rate of the money supply, which is 11% (see the velocity equation).

c. Answer:

<table>
<thead>
<tr>
<th></th>
<th>t-1</th>
<th>t</th>
<th>t+1</th>
<th>t+2</th>
<th>t+3</th>
</tr>
</thead>
<tbody>
<tr>
<td>inflation</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>unemployment</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>growth</td>
<td>3</td>
<td>-7</td>
<td>13</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>money growth</td>
<td>11</td>
<td>-3</td>
<td>17</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Note that the entire economy has stabilized after period t+2.