1. Which of the following actions should the Fed take to try and reduce unemployment? For each answer, explain why it is or isn’t appropriate for the Fed to do. Points are based on the explanation.

A. Buy government bonds. (1)

B. Lower wages. (1)

C. Lower the prime rate. (1)

D. Lower reserve requirements. (1)

E. Reduce the money supply. (1)
2. Explain how a large sale of government bonds by the Federal Reserve will affect:
   A. the bond market.

   B. interest rates.

   C. nominal GDP.
3. When the central bank changes the money supply, it has two impacts on the AS/AD model. One is the effect of changing interest rates on AS/AD and the other is the effect of changing exchange rates (which change due to changing interest rates) on AS/AD. Do changing interest rates and changing exchange rates have the same impact on the AS/AD model, or do they work in opposite directions when the central bank changes the money supply? Explain.

4. The equation of exchange is the following:

\[ \%\Delta M + \%\Delta V = \%\Delta Y + \%\Delta P \]

where
- M is the money supply
- V is velocity
- Y is real GDP
- P is the price level

A. Define velocity.

B. If velocity is rising by 1% annually and nominal GDP is rising at 5% annually, how quickly is the money supply growing?

C. How has velocity in the U.S. changed over the last fifty years or so?
5. One the first concepts we discussed was a production possibilities frontier.
A. Imagine a production possibilities frontier for bells and whisky. How would the frontier change if a new technology from Australia was introduced that allowed for greater production of bells?

B. How is a production possibilities frontier like a Phillips curve?
6. Here’s the standard graph for equilibrium in international trade:

![Equilibrium Graph]

**Exporting Country**

| $   | S
|-----|---
| P   | D
| Q   |

**Importing Country**

| $   | S
|-----|---
| D   |

A. What will be the impact on the quantity exported and the price if supply in the importing country increases?

C. What will be the impact on the quantity exported and the price if demand in the exporting country decreases?
7. Describe what happens to each of the following macroeconomic statistics as a result of the indicated actions.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Fed Sells Bonds</th>
<th>Fed Buys Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money Supply</td>
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<tr>
<td>Interest Rates</td>
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<td>Unemployment</td>
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<tr>
<td>Price Levels</td>
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<tr>
<td>Value of the Dollar</td>
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<tr>
<td>Net Exports</td>
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</tbody>
</table>

8. One of the all time great papers in economics described the use of cigarettes as commodity money in prisoner of war camps in World War II. The thing about cigarettes, and commodity money in general, is that it may be consumed as well as used as money.

A. What characteristics do cigarettes have that would make them good money?

B. On regular occasions the camps would receive deliveries of packages from the Red Cross that included cigarettes. What impact would these deliveries have on prices for other goods in the camps?
9. The monetarist view of the economy suggests that increased government borrowing leads to reduced private borrowing and reduced investment because of crowding out in credit markets.

A. Draw a picture of the market for credit that is consistent with the monetarist view of the economy.

B. Draw a picture of the investment demand curve that is consistent with the monetarist view of the economy.
Multiple Choice Section
Circle the best answer to each question. One point each.

1. Which of the following fiscal and monetary moves will have the same effect as far as being expansionary or contractionary?
   A. Increase government spending and sell bonds.
   B. Decrease both government spending and the money supply.
   C. Decrease government spending and buy bonds.
   D. Reduce taxes and decrease the money supply.

2. When an economy’s PPF shifts out to reflect increased capacity to produce one of the two goods:
   A. The economy will choose to produce more of that good but not more of the other.
   B. The economy will choose to produce more of that good and less of the other.
   C. The potential production of the other good will fall due to the increased opportunity cost of production.
   D. The potential production of the other good will not change.

3. Which of the following will increase an economy’s opportunities for gains from trade?
   A. A larger set of trading partners.
   B. Tariffs imposed to protect domestic industries.
   C. A weak currency that will encourage exports and discourage imports.
   D. Quotas that will protect domestic jobs from unfair foreign competition.

4. Indexing Social Security benefits to changes in the consumer price index will:
   A. Make recipients better off over time if the basket of goods does not change.
   B. Assure that all recipients are able to buy next year what they bought this year.
   C. Make recipients better off if inflation is higher because the amount they receive will increase at a greater rate.

5. Which of the following are important policy tools of the Fed?
   A. The prime rate.
   B. Tax policy.
   C. Open market operations.
   D. All of the above.

6. Which of the following is most important to the growth of an economy?
   A. A good stock of natural resources.
   B. A large amount of available land per person.
   C. A quickly growing money supply.
   D. Good property rights and economic freedom.