Part A. Multiple Choice Questions (5 points each)

1. Refer to the graph below. What is the value of the marginal propensity to consume (MPC)?

![Graph showing consumption and income]

- a. 1.5
- b. 1.66
- c. 0.5
- d. 0.6

2. According to the balanced budget multiplier, a decrease in government spending of $100 billion followed by a decrease in lump-sum tax of $100 billion results in:

- a. An increase in equilibrium income greater than $100 billion
- b. A decrease in equilibrium income equal to $100 billion
- c. An increase in equilibrium income equal to $100 billion
- d. A decrease in equilibrium income greater than $100 billion

3. If the Central Bank wants to increase the money supply, it will:

- a. Buy government securities in the open market
- b. Sell gold
- c. Increase the reserve requirement
- d. Increase the discount rate

4. Fill in the blanks. A good indicator of the total number of transactions in the economy is ____________, while the average amount of each transaction depends more directly on ____________.

- a. the interest rate; income
- b. income; the interest rate
- c. the interest rate; the price level
- d. income; the price level

5. Fill in the blanks. When income falls, the demand for money ____________ and the interest rate ____________.
a. rises; rises
b. falls; falls
c. rises; falls
d. falls; rises

6. The effect of *contractionary monetary policy* is as follows:
   a. $\downarrow M' \rightarrow r \downarrow \rightarrow I \downarrow \rightarrow Y \downarrow \rightarrow M^*$ $\downarrow$
   b. $\downarrow M' \rightarrow r \downarrow \rightarrow I \uparrow \rightarrow Y \downarrow \rightarrow M^*$ $\uparrow$
   c. $\downarrow M' \rightarrow r \uparrow \rightarrow I \downarrow \rightarrow Y \downarrow \rightarrow M^*$ $\downarrow$
   d. $\downarrow M' \rightarrow r \uparrow \rightarrow I \downarrow \rightarrow Y \uparrow \rightarrow M^*$ $\uparrow$
   e. $\downarrow M' \rightarrow r \uparrow \rightarrow I \downarrow \rightarrow Y \downarrow \rightarrow M^*$ $\uparrow$

7. Refer to the graph below. Which move best depicts the impact of expansionary fiscal policy with crowding out?

8. The money demand curve will shift to the right when:
   a. the price level falls
   b. dollar volume of transactions falls
   c. interest rate increases.
   d. the price level increases
Part B. Problems and Essay Questions

1. Assume that Money Demand and Money Supply for an economy equations are given as:
   \[ Md = 1800 - 10000r \]  \[ Ms = 800, \]
   where \( r \) is the interest rate. The reserve requirement ratio is 20% and the banking system does not have any excess reserves.

   a) What is the equilibrium interest rate?

   b) If the Central Bank wants to adjust the interest rate to 5%,

      i) What should be the value of Money Supply?

      ii) In order to achieve the goal of setting the new required Money Supply, what should the Central Bank do? What should be the required change in reserves?

   c) What is the effect of interest rate change (in part b) on bond prices?

2. You are given this account for a bank:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>$500</td>
</tr>
<tr>
<td>Deposits</td>
<td>$3500</td>
</tr>
<tr>
<td>Loans</td>
<td>$3000</td>
</tr>
</tbody>
</table>

   The required ratio is 10%.

   a) How much this bank required to hold as reserves given its deposits of $3500?

   b) How much are its excess reserves?

   c) By how much can the bank increase its loans?

   d) Suppose a depositor comes to the bank and withdraws $300 in cash. Show the bank’s new balance sheet, assuming that the bank obtains the cash by drawing down its reserves. Is the bank meeting the reserve requirement ratio? Show the final balance sheet of the bank.
3) For each of the following predict the effects on equilibrium levels of aggregate output (Y) and interest rate (r) and indicate whether it’s expansionary/contractionary fiscal or monetary policy.

a) After the crisis in 2001, Central Bank bought foreign exchange, especially dollars from the public.

b) In 2004, the Government passed a bill that cut the corporate tax from 30% to 25%.

**Bonus:** Who is the current president of the World Bank?