## Unit 5 AP Macro Financial Sector

## Multiple Choice

Identify the choice that best completes the statement or answers the question.
$\qquad$ 1. Which of the following is considered investment spending in macroeconomics?
a. GM builds a new plant to manufacture automobiles.
b. Ryan Jones buys some GM stock.
c. Ryan Jones buys some GM bonds.
d. Ryan Jones sells some GM stock.
e. Ryan Jones buys a GM automobile.

Scenario 22-1: Closed Economy $\boldsymbol{S}=\boldsymbol{I}$
In a closed economy suppose that GDP is $\$ 12$ trillion. Consumption is $\$ 8$ trillion and government spending is $\$ 2$ trillion. Taxes are $\$ 0.5$ trillion.
2. Use Scenario 22-1. How much is national saving?
a. $\$ 3.5$ trillion
b. $\$ 3$ trillion
c. $\$ 2.5$ trillion
d. $\$ 2$ trillion
e. $\$ 1.5$ trillion

## Scenario 22-3: Economy of Centralia

Centralia has no trade and no government. GDP = $\$ 25$ trillion. Consumption Spending $=\$ 18$ trillion.
3. Use Scenario 22-3. Consider the information on the economy of Centralia. What is the level of investment spending in Centralia?
a. $\quad \$ 18$ trillion
b. $\$ 7$ trillion
c. $\$ 25$ trillion
d. $-\$ 7$ trillion
e. $\$ 43$ trillion
$\qquad$ 4. A loan is:
a. a liability for the lender and an asset for the borrower.
b. a physical asset that is traded in financial markets.
c. a claim on a bank that obliges the bank to provide funds to a lender.
d. a liability for the borrower and an asset for the lender.
e. a liability for both the borrower and the lender.
$\qquad$ 5. Financial markets make the process of borrowing large amounts of money easier because they simplify the negotiation process between borrowers and lenders. This is an example of:
a. reducing transaction costs.
b. reducing risk.
c. providing liquidity.
d. acting as a lender of last resort.
e. crowding out.
6. If the price of an asset is expected to rise in the future:
a. asset owners will be more willing to sell it now.
b. it will be more in demand today.
c. the price of the asset will fall today.
d. the supply of the asset will increase today.
e. the demand for the asset will decrease today.
7. If an economy is closed and wishes to increase its investment spending:
a. the government will increase taxes on interest earned on savings.
b. its sources of funding are domestic and foreign saving.
c. the government will need to increase its spending to provide for this.
d. the government will increase taxes to provide for this.
e. its only source of funding is domestic saving.
8. The government of Foxystan has a budget surplus this year and operates in an open economy with exports equal to imports. How will the budget surplus affect capital investment?
a. Capital investment decreases because net exports is positive.
b. Capital investment decreases because the budget balance is negative.
c. Capital investment increases because the budget balance is positive.
d. Capital investment increases because the capital inflow is positive.
e. Capital investment decreases because the capital inflow is negative.
9. A share of stock is considered:
a. a financial asset.
b. part of M2.
c. a liability.
d. part of the money supply.
e. the same as a bond.
10. When you buy a ticket to the rodeo, you are using money as a(n):
a. expander of economic activity.
b. store of value.
c. factor of production.
d. medium of exchange.
e. instrument of long-run economic growth.
11. When you discover money in your coat that you placed there last winter, you unexpectedly find you were using money as $a(n)$ :
a. medium of exchange.
b. expander of economic activity.
c. factor of production.
d. store of value.
e. instrument of barter.
12. If currency in circulation is $\$ 100$ million, demand deposits are $\$ 500$, savings deposits are $\$ 300$ million and travelers' checks are $\$ 10$ million, then the M1 money supply is:
a. $\$ 100$ million.
b. $\$ 410$ million.
c. $\$ 610$ million.
d. $\$ 900$ million.
e. $\$ 600$ million.
13. Suppose you transfer $\$ 500$ from your savings account to your checking account. With this transaction, M1 $\qquad$ and M2 $\qquad$ .
a. increased; decreased
b. increased; stayed the same
c. decreased; decreased
d. stayed the same; decreased
e. increased; increased
14. Traveler's checks and checkable deposits are:
a. part of M1.
b. considered near monies.
c. part of the monetary base.
d. not considered part of the money supply.
e. considered illiquid financial assets.
15. The reserve ratio is the:
a. bank's holdings of gold.
b. government's holdings of gold at Fort Knox.
c. fraction of deposits the banks hold in their vaults.
d. ratio of gold to the paper money in the economy.
e. fraction of deposits that are lent to borrowers.

| Assets | Liabilities |  |  |
| :--- | ---: | :--- | :--- |
| Cash in bank vault | $\$ 2$ million | Checkable deposits <br> million |  |
| Deposits at the Federal Reserve | $\$ 13$ million |  |  |
| Loans | $\$ 75$ million |  |  |
| Property | $\$ 8$ million |  |  |
| Bonds | $\$ 2$ million |  |  |
| Table 25-2: ABC Bank's Balance Sheet |  |  |  |

16. Use Table 25-2. Refer to the balance sheet. If the minimum reserve ratio for ABC Bank is $10 \%$, then the bank is required to maintain minimum reserves of:
a. $\$ 10$ million.
b. $\$ 15$ million.
c. $\$ 9.5$ million.
d. $\$ 7.5$ million.
e. $\$ 90$ million.

Scenario 25-1 First National Bank First National Bank has $\$ 80$ million in checkable deposits, $\$ 15$ million in deposits with the Federal Reserve, $\$ 5$ million cash in the bank vault and $\$ 5$ million in government bonds.
17. Use Scenario 25-1. Consider the information for First National Bank. If the minimum reserve ratio is $20 \%$, what are the excess reserves available for the bank to lend?
a. $\$ 76$ million
b. $\$ 8$ million
c. $\$ 6$ million
d. $\$ 4$ million
e. $\$ 20$ million.
18. A bank run can "break a bank" because:
a. borrowers default on their loans, and the bank's assets become worthless.
b. banks can not convert quickly illiquid loans into liquid assets without facing a large financial loss.
c. depositors' panic spreads to borrowers, who want to take additional loans from the bank.
d. the bank's reserves kept with the Federal Reserve are in the form of illiquid U.S. Treasury bonds.
e. the banks cannot quickly convert liquid assets like checking deposits to cover illiquid liabilities like loans.
19. Suppose your grandma sends you $\$ 100$ for your birthday and you deposit $\$ 100$ into your checking account at the local bank. The reserve ratio is $10 \%$. Based upon this deposit, the bank's excess reserves have increased by $\qquad$ and, if the bank lends all excess reserves, the money supply could eventually
grow by as much as $\qquad$ .
a. $\quad \$ 90 ; \$ 1000$
b. $\$ 100 ; \$ 900$
c. $\$ 90 ; \$ 900$
d. $\$ 100 ; \$ 1000$
e. $\$ 1000 ; \$ 10,000$
20. If a bank has deposits of $\$ 100,000$, cash on hand of $\$ 10,000$ and $\$ 15,000$ on deposit at the Federal Reserve, and the required reserve ratio is 0.20 , then the bank:
a. has no excess reserves.
b. has excess reserves of $\$ 5,000$.
c. has insufficient reserves to meet requirements.
d. has an insufficient deposit to loan ratio.
e. has excess reserves of $\$ 10,000$.
21. Holding everything else constant, if the required reserve ratio falls, then:
a. the money multiplier increases.
b. a $\$ 1$ loan can lead to a smaller change in the money supply than before the change in the required reserve ratio.
c. the amount of excess reserves falls also.
d. the money multiplier decreases.
e. the money supply will decrease.
22. The tool of monetary policy that involves the Fed's buying and selling of government bonds is:
a. moral suasion.
b. reserve requirements.
c. the discount rate.
d. open-market operations.
e. setting government transfer payments.
23. If the Fed increases the discount rate:
a. the money supply is likely to decrease.
b. the money supply is likely to increase.
c. the money supply is not likely to change.
d. the federal funds rate must decrease.
e. nominal interest rates will fall.
24. Which of the following actions would allow banks to lend out more money?
a. an increase in the required reserve ratio
b. a decrease in the discount rate
c. an increase in the federal funds rate
d. an increase in the required reserve ratio coupled with an increase in the federal funds rate
e. an open market sale of Treasury securities.
25. The discount rate is the interest rate the Fed charges on loans to:
a. consumers.
b. the federal government.
c. state governments.
d. banks.
e. corporations.
26. The Fed's main assets are:
a. currency in circulation and bank reserves.
b. the facilities of the twelve district banks.
c. corporate stocks and bonds.
d. U.S. Treasury bills.
e. checking deposits.
27. To $\qquad$ the money supply, the Fed could $\qquad$ .
a. increase; decrease the money multiplier
b. decrease; lower the reserve requirements
c. increase; conduct open-market purchases
d. decrease; lower the discount rate
e. increase; increase government spending.
28. The federal funds rate is the interest rate at which:
a. banks borrow funds directly from the Federal Reserve.
b. banks borrow excess reserves from other banks.
c. influential companies borrow from banks.
d. households' savings are invested in the Federal Reserve.
e. the government borrows funds from the Federal Reserve.
29. When the short-term interest rate $\qquad$ , the opportunity cost of holding money $\qquad$ , and the quantity of money individuals want to hold $\qquad$ .
a. falls; falls; falls
b. falls; falls; rises
c. rises; falls; falls
d. rises; falls; rises
e. rises; rises; rises
30. Improvements in information technology have:
a. shifted the demand for cash to the right.
b. decreased the demand for money.
c. not affected the demand for money
d. increased the demand for money.
e. increased the transaction demand for money.
31. The fact that a larger number of stores in the United States have found it economical to accept credit cards has:
a. increased the demand for money.
b. decreased the demand for money.
c. increased the demand for credit card transactions but has had no impact on the demand for money.
d. decreased the demand for credit card transactions but has had no impact on the demand for money.
e. increased the demand for credit card transactions and increased the demand for money.
32. Suppose that the economy enters a recession and real GDP falls. All else equal, we would expect:
a. the money demand curve to shift inward.
b. the money demand curve to shift outward.
c. a downward movement along a fixed money demand curve.
d. an upward movement along a fixed money demand curve.
e. no impact on the money demand curve.
33. If real GDP decreases in an economy where the central bank is not changing its monetary policy, one would expect:
a. the supply of money to fall.
b. the interest rate in the economy to fall.
c. the demand for money to rise.
d. the demand for money to be unchanged.
e. the level of potential GDP to rise.

Figure 29-6: Market for Loanable Funds II

34. Use the "Market for Loanable Funds II" Figure 29-6. If the interest rate is $\qquad$ than $\qquad$ , then the quantity supplied of loanable funds will $\qquad$ the quantity of loanable funds demanded.
a. greater, $8 \%$; be greater than
b. greater $8 \%$; be less than
c. greater $8 \%$; equal
d. less; $5 \%$; be greater than
e. lesser; $8 \%$; equal
$\qquad$ 35. If the interest rate in the market for loanable funds is above the equilibrium interest rate, we know that:
a. there is a shortage of loanable funds.
b. savings exceed investment spending.
c. the quantity demanded of loanable funds exceeds the quantity supplied of loanable funds.
d. consumption is smaller than savings.
e. the interest rate will begin to rise to clear the surplus of loanable funds.
$\qquad$ 36. An increase in the demand for loanable funds would most likely be caused by $\mathrm{a}(\mathrm{n})$ :
a. increase in the market interest rate.
b. increase in business tax rates.
c. increase in the amount of expected business opportunities
d. decrease in the amount of expected business opportunities.
e. increase in private savings.
37. Crowding out is a phenomenon:
a. where an increase in government's budget surplus decreases the overall investment spending.
b. where overproduction in the goods market leads to a sharp drop in the aggregate price level.
c. where an increase in government spending causes an equal decrease in consumption spending.
d. where an increase in imports causes the overall domestic production to fall.
e. where an increase in government's budget deficit causes the overall investment spending to fall.
38. If in an open economy, the government's budget deficit increases at the same time as the trade deficit grows, this will lead to a(n) $\qquad$ in the demand and $\mathrm{a}(\mathrm{n})$ $\qquad$ in the supply of loanable funds in domestic markets.
a. increase; decrease
b. decrease; decrease
c. increase; increase
d. decrease; increase
e. increase; ambiguous change
39. Governments can engage in saving when:
a. tax revenues are less than expenditures.
b. tax revenues are greater than expenditures.
c. the government borrows to finance its expenditures.
d. the president insists that Congress balance the budget.
e. tax revenues are equal to expenditures.
40. The government can increase national savings by:
a. taxing more than it spends.
b. spending more than it taxes.
c. increasing inflation.
d. increasing the budget deficit.
e. increasing the tax rate on interest earned on savings.
41. The Fisher Effect states that:
a. the nominal rate of interest is unaffected by the change in expected inflation.
b. the nominal rate of interest is unaffected by the change in unexpected inflation.
c. the expected real rate of interest is unaffected by the change in expected inflation.
d. the expected real rate of interest increases by one percentage point for each percentage point change in expected inflation.
e. the nominal rate of interest increases by one percentage point for each one percentage point decrease in expected inflation.
42. Crowding out results in $\mathrm{a}(\mathrm{n})$ :
a. decrease in private investment spending resulting from government deficit spending.
b. increase in physical capital accumulation which leads to higher economic growth.
c. increase in private investment spending resulting from a government surplus.
d. increase in consumption spending as a result of higher investment spending.
e. decrease in private investment spending due to a positive foreign capital inflow.
43. The loanable funds model focuses on the:
a. demand for money.
b. supply of funds from lenders.
c. supply of funds from borrowers and the demand for funds by lenders
d. supply of funds from lenders and the demand for funds from borrowers.
e. supply of money.
44. The loanable funds market is in equilibrium. If firms and households both become less optimistic about the economy, we expect to see:
a. a certain decrease in the interest rate with a certain increase in the quantity of loanable funds saved and borrowed.
b. a certain increase in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
c. a certain decrease in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
d. an ambiguous change in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
e. an ambiguous increase in the interest rate with a certain increase in the quantity of loanable funds saved and borrowed.
45. The loanable funds market is in equilibrium. If the government reduces the size of the budget deficit, while at the same time real household income is falling, we expect to see:
a. a certain decrease in the interest rate with a certain increase in the quantity of loanable funds saved and borrowed.
b. a certain increase in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
c. a certain decrease in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
d. an ambiguous change in the interest rate with an ambiguous change in the quantity of loanable funds saved and borrowed.
e. an ambiguous increase in the interest rate with a certain increase in the quantity of loanable funds saved and borrowed.
45. ANS: C PTS: 1 DIF: D REF: Module 29

MSC: Concept-Based

## ESSAY

1. ANS:

Rubric (6 points)
a. (2 points) The $\$ 10,000$ loan is an asset for the bank, and a liability to Theodore because he has agreed to repay the $\$ 10,000$ plus interest to the bank.
b. (2 points) The shares of stock are an asset for Kylie and a liability for Toyota because Toyota has sold a small fraction of ownership of Toyota to Kylie.
c. ( 2 points) The bond is an asset for Kimery and a liability for Fredericksburg because the holder of the bond (Kimery) is lending the issuer (the city) funds. The city will eventually repay that loan with interest.

PTS: 6 REF: Section $5 \mid$ Module 22
2. ANS:

Rubric (5 points)
a. (1 point) Commodity money.
(1 point) Besides being used as money, it has intrinsic value as drinkable milk.
b. (1 point) Milk could be used as a medium of exchange if people used it to purchase other goods and services. However it would be difficult for a person to keep a lot of milk on hand, or in their pockets, to purchase many items.
(1 point) Milk is not a very good store of value because it rapidly gets sour and sour milk isn't as drinkable as fresh milk.
(1 point) Milk could be used as a unit of account, so long as the quality was uniform.

PTS: 5 REF: Section 5 | Module 23
3. ANS:

Rubric (4 points)
a. 1 point for calculating $\mathrm{PV}=\$ 2500 /(1.05)^{4}=\$ 2056.76$ and for showing the work.

1 point for stating the $\$ 2500$ in four years.
b. 1 point for calculating $\mathrm{FV}=\$ 2000^{*}(1.06)^{4}=\$ 2524.95$ and for showing the work. 1 point for stating that you should take the $\$ 2000$ and invest it for four years.

PTS: 4
REF: Section 5 | Module 24
4. ANS:

Rubric (4 points)
a. 1 point for stating that deposits are $\$ 10,000,000$.

1 point for explaining that since the bank is not holding any cash reserves, the $\$ 1,000,000$ must be required reserves.
b. 1 point for stating that the bank can lend $90 \%$ of $\$ 2000$ or $\$ 1800$, so required reserves must be $10 \%$ of $\$ 2000$ or $\$ 200$.
c. 1 point for stating that the money supply could increase by as much as $10 * \$ 1800=\$ 18,000$.

PTS: 4 REF: Section 5 | Module 25
5. ANS:

Rubric (3 points)
a. 1 point for stating that the Board of Governors oversees the entire Federal Reserve system. 1 point for stating that the FOMC includes the Board of Governors, plus five of the regional bank presidents and has the important job of conducting monetary policy.
b. 1 point for describing how presidential appointment to 14 -year terms, rather than general elections, insulates the members from political pressures and allows for monetary policy that is best for the nation rather than individual, or party, interests.

PTS: 3 REF: Section 5 | Module 26
6. ANS:

Rubric (6 points)
a. 3 points for stating that the three tools are: open market operations, the discount rate and the reserve requirement.
b. 1 point for selling securities

1 point for increasing the discount rate
1 point for increasing the reserve requirement.

PTS: 6
REF: Section 5 | Module 27
7. ANS:

Rubric (6 points)
a. 1 point for a vertical axis labeled "interest rate" or " $r$ " and the horizontal axis labeled as "quantity of money".
1 point for a vertical money supply curve and labeled.
1 point for downward sloping money demand curve and labeled.
1 point for equilibrium interest rate identified as $\mathrm{r}^{*}$ on the vertical axis at the intersection of money supply and money demand.
b. 1 point showing the money demand curve shifting to the right.

1 point showing the new equilibrium interest rate $\mathrm{r}^{* *}$ increasing.


PTS: 6
REF: Section 5 | Module 28
8. ANS:

Rubric (8 points)
a. 1 point for an increase in the demand curve.

1 point for an increase in the interest rate.
b. 1 point for a decrease in the supply curve.

1 point for an increase in the interest rate.
c. 1 point for an increase in the supply curve.

1 point for a decrease in the interest rate.
d. 1 point for a decrease in the demand curve.

1 point for a decrease in the interest rate.

PTS: 8
REF: Section 5 | Module 29

