Questions and Answers

Intermediate Macroeconomics

Second Year

Chapter 2

Q1: MCQ

1) If the quantity of money increases, the
A) price level rises and the $AD$ curve does not shift.
B) $AD$ curve shifts leftward and aggregate demand decreases.
C) $AD$ curve does not shift and there is a movement upward along the curve.
D) $AD$ curve shifts rightward and aggregate demand increases.
Answer: D

2) Which of the following shifts the aggregate demand curve rightward?
A) a decrease in the price level
B) a decrease in government expenditures
C) an increase in the quantity of money
D) a decrease in transfer payments
Answer: C

3) The U.S. aggregate demand curve shifts leftward if
A) the economic conditions in Europe improve so that European incomes increase.
B) there is a tax cut.
C) the Federal Reserve hikes the interest rate.
D) the exchange rate falls.
Answer: C

4) Which of the following increases aggregate demand and shifts the $AD$ curve rightward?
A) a fall in the price level
B) an increase in the quantity of money and a resulting fall in the interest rate
C) predictions of a recession that lead to expectations of lower future income
D) an increase in the exchange rate that makes imports less expensive
Answer: B

5) Aggregate demand increases if the quantity of money ________.
A) decreases or tax rates increase
B) or transfer payments decrease
C) remains constant or tax rates increase
D) increases or tax rates decrease
Answer: D

6) The U.S. exchange rate rises. As a result, there is a
A) movement along the U.S. aggregate demand curve but the curve does not shift.
B) rightward shift in the U.S. aggregate demand curve.
C) leftward shift in the U.S. aggregate demand curve.
D) rightward shift in the long-run U.S. aggregate supply curve.
7) When the exchange rises, then the
A) $AD$ curve shifts rightward.
B) $AD$ curve shifts leftward.
C) $LAS$ curve shifts rightward.
D) $LAS$ curve shifts leftward.
Answer: B

8) Suppose the exchange rate falls from $1.20$ Canadian per U.S. dollar to $1.10$ Canadian per U.S. dollar. U.S. exports will ________, U.S. imports will ________, and U.S. aggregate demand will ________.
A) decrease; increase; decrease
B) decrease; increase; increase
C) increase; decrease; increase
D) increase; increase; increase
Answer: C

9) A decrease in foreign incomes
A) increases aggregate demand in the United States.
B) increases the aggregate quantity demanded in the United States.
C) decreases the aggregate quantity demanded in the United States.
D) decreases aggregate demand in the United States.
Answer: D

10) An increase in foreign incomes
A) increases aggregate demand in the United States.
B) increases the aggregate quantity demanded in the United States.
C) decreases the aggregate quantity demanded in the United States.
D) decreases aggregate demand in the United States.
Answer: A

11) In the above figure, the economy is initially at point $B$. If the government decreases transfer payments, there is
A) a movement to point $C$.
B) a movement to point $A$.
C) a shift to $AD_2$.
D) a shift to $AD_1$.
Answer: C
12) In the above figure, the economy is initially at point B. If taxes increase, there is
   A) a movement to point C.
   B) a movement to point A.
   C) a shift to AD2.
   D) a shift to AD1.
   Answer: C

13) In the above figure, the economy is initially at point B. If the Fed decreases the quantity of money,
there is
   A) a movement to point C.
   B) a movement to point A.
   C) a shift to AD2.
   D) a shift to AD1.
   Answer: C

14) In the above figure, the economy is initially at point B. If the Fed increases the quantity of money, there
is
   A) a movement to point C.
   B) a movement to point A.
   C) a shift to AD2.
   D) a shift to AD1.
   Answer: D

15) In the above figure, if the economy is at point a, an increase in ________ will move the economy to
   ________.
   A) real wealth from the fall in the price level; point b
   B) real wealth from the fall in the price level; point c
   C) expected future income; point c
   D) expected future income; point d
   Answer: B

16) In the above figure, if the economy is at point a, an increase in ________ will move the economy to
   ________.
   A) real wealth; point d
   B) real wealth from a fall in the price level; point d
   C) expected future income; point b
D) expected future income; point $d$
Answer: C

17) In the above figure, the movement from point $B$ to point $A$ might be the result of
A) an increase in government expenditures because of a war.
B) an increase in government expenditures because of increases in education expenditures.
C) an increase in the demand for manufacturing goods because of new technology.
D) a fall in the price level.
Answer: D

18) In the above figure, the shift from point $C$ to point $B$ might be the result of
A) an increase in the price level.
B) a decrease in the price level.
C) a decrease in government expenditures.
D) an increase in the quantity of money.
Answer: C

19) The curve labeled $A$ in the above figure is
A) a short-run aggregate supply curve.
B) an aggregate demand curve.
C) a long-run aggregate supply curve.
D) a production possibilities curve.
20) In the above figure, the curve labeled A shifts rightward if
A) expected future profits decrease.
B) the quantity of money decreases.
C) the substitution effect occurs.
D) taxes decrease.
Answer: D

21) The aggregate demand curve illustrates that, as the price level rises,
A) the quantity of real GDP demanded increases.
B) the quantity of real GDP demanded decreases.
C) the AD curve shifts rightward.
D) the AD curve shifts leftward.
Answer: B

22) As the price level falls, the quantity of real wealth _______ and the aggregate quantity of real GDP demanded _______.
A) increases; increases
B) increases; decreases
C) decreases; increases
D) decreases; decreases
Answer: A

Monetary Policy

1 Monetary Policy Objectives and Framework

1) Which of the following is one of the Fed’s policy goals?
A) help the President win reelection
B) exchange rate
C) monetary base
D) price level stability
Answer: D

2) The Fed's goals include
A) open market operations.
B) price level stability.
C) the monetary base.
D) the federal funds rate.
Answer: B

3) Federal Reserve monetary policy goals include
A) ensuring banks can meet their profit maximization objectives.
B) discount rate stability
C) zero percent unemployment in the domestic economy.
D) price level stability
Answer: D

4) The Federal Reserve monetary policy goals of maximum employment means
A) a zero percent unemployment rate.
B) a zero percent natural unemployment rate.
C) keeping the unemployment rate close to the natural unemployment rate.
D) cyclical unemployment should not necessarily be minimized.
Answer: C
5) Which of the following are NOT Federal Reserve monetary policy goals?
A) moderate long-term interest rates
B) price level stability
C) maximum employment
D) zero percent unemployment.
Answer: D

6) The key goal of monetary policy is to
A) reverse the productivity growth slowdown
B) keep the budget deficit small and/or the budget surplus large.
C) lower taxes
D) maintain low inflation
Answer: D

7) The key aim of monetary policy is to
A) change government spending to spur innovation.
B) maintain price stability
C) change tax rates to boost investment.
D) change tax rates to boost saving.
Answer: B

8) Which of the following is the most important Federal Reserve monetary policy goal?
A) moderate long-term interest rates
B) minimum unemployment.
C) maximum employment
D) price level stability
Answer: D

9) In the short run, the Federal Reserve faces a tradeoff between
A) economic growth and employment.
B) inflation and price stability.
C) inflation and unemployment.
D) real GDP growth and potential GDP growth.
Answer: C

10) In the short run, the Federal Reserve faces a tradeoff between
A) economic growth and employment.
B) inflation and price stability.
C) inflation and real GDP.
D) interest rates and unemployment.
Answer: C

11) The core inflation rate, measured by the core PCE deflator, measures changes in the
A) price of only two consumer goods: food and fuel
B) prices of all consumer goods
C) prices of consumer goods except food and fuel.
D) prices of consumer goods except health care.
Answer: C

12) To determine whether the goal of stable prices is being achieved, the Federal Reserve monitors the
_______ but uses as its operational guide the ________.
A) core CPI; core inflation rate
B) core inflation rate; CPI inflation rate
C) CPI; core inflation rate
D) GDP price deflator; CPI
Answer: C
13) The output gap is the
A) percentage deviation of real GDP from potential GDP.
B) difference between actual inflation and core inflation.
C) difference in graduation levels between high school and college.
D) percentage increase in the economic growth rate of real GDP.
Answer: A

14) When the output gap is positive, it represents _______ gap, and when it is negative, it represents _______ gap.
A) a recessionary; an inflationary
B) an inflationary; an employment
C) an inflationary; a recessionary
D) an employment; an unemployment
Answer: C

15) The output gap can be used to estimate the extent to which the Fed misses its goal of
A) maximum employment.
B) stable prices.
C) moderate long-term interest rates.
D) monetary policy.
Answer: A

16) Which of the following bodies are responsible for the conduct of monetary policy?
A) the Federal Reserve System
B) Congress
C) the President
D) Congress and the President, jointly
Answer: A

17) Monetary policy is controlled by
A) Congress.
B) the president.
C) the Federal Reserve.
D) the Treasury Department.
Answer: C

18) Price level stability
A) has no relationship to growth in potential GDP.
B) is thought by most economists to be reached with a measured inflation rate of between 0 and 2 percent a year.
C) is the most important tool of the Federal Reserve.
D) was attained by the Fed for the period between 1979 and 2001.
Answer: B

**Monetary Policy Transmission**

1) Monetary policy affects real GDP by
A) changing aggregate supply.
B) creating budget surpluses.
C) changing aggregate demand.
D) creating budget deficits.
Answer: C

2) Monetary policy includes adjustments in _______ so as to change _______.
A) the federal funds rate; short-run aggregate supply
B) open market operations; long-run aggregate supply
C) the quantity of money; short-run aggregate supply
D) the federal funds rate; aggregate demand

Answer: D

3) Monetary policy produces ripple effects, some of which happen quickly and some that can take years to produce change. Which of the following takes the longest to change?
A) inflation rate
B) federal funds rate
C) exchange rate
D) monetary base
Answer: A

4) If the interest rate on Treasury bills is higher than the federal funds rate, the quantity of overnight loans supplied ________ and the ________ for Treasury bills increases.
A) decreases; demand
B) decreases; supply
C) increases; demand
D) increases; supply
Answer: A

5) Long-term interest rates are ________ than short-term because long-term loans are ________ than short-term loans.
A) higher; riskier
B) higher; safer
C) lower; safer
D) lower; riskier
Answer: A

6) If the Fed lowers the federal funds rate (Required reserve ratio), then
A) investment and consumption expenditure decrease.
B) the price of the dollar rises on the foreign exchange market and so net exports decrease.
C) a multiplier process that affects aggregate demand occurs.
D) All of the above answers are correct.
Answer: C

7) When the Fed lowers the federal funds rate, aggregate demand
A) increases.
B) decreases.
C) stays the same.
D) could increase, decrease or stay the same.
Answer: A

8) To increase the quantity of money in the economy, the Federal Reserve is likely to
A) print more money and give it to the banks.
B) lower tax rates
C) sell government securities in an open market operation.
D) buy government securities in an open market operation.
Answer: D

9) If the Fed wants to increase the quantity of money, it can
A) lower income tax rates.
B) purchase U.S. government securities.
C) increase the government budget deficit.
D) raise the exchange rate.
Answer: B

10) If the Fed wants to decrease the quantity of money, it can
A) decrease the government budget deficit.
B) purchase U.S. government securities.
C) sell U.S. government securities.
D) raise income tax rates.
Answer: C

11) Which of the following increases the quantity of money?
A) an individual’s cash withdrawal from a bank
B) an individual’s purchase of a government security from the Fed
C) the Fed’s purchase of a government security
D) an increase in the government’s budget deficit
Answer: C

12) Open market purchases by the Federal Reserve System (the Fed)
A) raise the federal funds rate.
B) increase bank reserves.
C) occur when the Fed wants to decrease the quantity of money.
D) All of the above answers are correct.
Answer: D

13) In the short run, an increase in the federal funds rate _______ the real interest rate and _______
investment.
A) lowers; increases
B) raises; increases
C) lowers; decreases
D) raises; decreases
Answer: D

14) When the Federal Reserve increases the Federal funds rate,
A) the quantity of reserves, the quantity of deposits, and bank loans all decrease.
B) the quantity of reserves decreases, while the quantity of deposits and bank loans both increase.
C) both the quantity of reserves and the quantity of deposits decrease, while bank loans increase.
D) the quantity of reserves, the quantity of deposits, and bank loans all increase.
Answer: A

15) When the Federal Reserve increases the Federal funds rate,
A) both the supply of bank loans and the supply of loanable funds decrease, thereby increasing the real interest rate.
B) the supply of bank loans decreases, while the supply of loanable funds and the real interest rate both increase.
C) both the supply of bank loans and the supply of loanable funds increase, while the real interest rate increases.
D) both the supply of bank loans and the supply of loanable funds increase, thereby decreasing the real interest rate.
Answer: A

16) When the Fed lowers the federal funds rate,
A) consumption expenditures decrease.
B) the dollar increases in value on foreign exchange markets.
C) net exports decrease.
D) investment expenditures increase.
Answer: D
17) The Fed lowers the federal funds rate. A mechanism through which aggregate demand increases is that the lower federal funds rate
A) increases other short-term interest rates, which decreases investment, thereby decreasing aggregate demand.
B) decreases other short-term interest rate, which decreases investment, thereby increasing aggregate demand.
C) raises the exchange rate so that net exports decrease, which increases investment, thereby increasing aggregate demand.
D) decreases other short-term interest rates, which increases investment, thereby increasing aggregate demand.
Answer: D

18) In the short run, a decrease in the federal funds rate by the Fed
A) lowers the real interest rate, decreases investment, and shifts the AD curve rightward.
B) lowers the real interest rate, increases investment, and shifts the AD curve leftward.
C) raises the real interest rate, decreases investment, and shifts the AD curve rightward.
D) None of the above answers is correct.
Answer: D

19) In the short run, monetary policy can
A) raise the federal funds rate, thereby decreasing the supply of loanable funds, raising the real interest rate, and decreasing investment.
B) lower the federal funds rate, thereby increasing the supply of loanable funds, and lowering the exchange rate.
C) raise the federal funds rate and shift the aggregate demand curve leftward.
D) All of the above answers are correct.
Answer: D

20) In the short run, a cut in the federal funds rate
A) raises other interest rates as people increase their saving.
B) increases potential GDP.
C) increases aggregate demand.
D) decreases aggregate demand.
Answer: C

21) When the Federal Reserve lowers the federal funds rate, in the short run
A) the long-run aggregate supply curve shifts leftward.
B) the aggregate demand curve shifts rightward.
C) the economy moves along a given aggregate demand curve.
D) banks decrease the quantity of loans they make.
Answer: B

Q3. Answer the following:

1. If speculation demand for money is given by the following equation:
\[ M^d = 300 - 15r \]
and the quantity of money supply available for speculation purposes is given by the equation:
\[ M^s = 75 \]
If the Investment function is given by the equation:
\[ I = 75 - 3r \]
and the consumption function is given by the equation:
\[ C = 20 + 0.75Y \]

   a) Determine initial equilibrium values in both money and product markets (show graphically).
b) If $M^s$ money supply available for speculation purposes increase to 120, find the new equilibrium values. Show graphically explaining how the transmission mechanism works.

2. If you are given the following model:
   \[ C = 155 + 0.75Y \]
   \[ I = 150 - 10r \]
   \[ M^d = 388 - 20r \]
   \[ M^s = 248 \]
   a) Determine the equilibrium level of national income.
   b) If $M^s$ money supply increases to $M^s = 304$ and money demand changes to be $M^d = 404 - 20r$, determine the new equilibrium level of national income.
   c) Explain the steps in which the increase in money supply leads to calculated change in equilibrium level of national income.
   d) Under what condition the given increase in money supply would be more effective?

3. The demand for money in a country is given by $M^d = 10,000 - 10,000r + P \cdot Y$ where $M^d$ is money demand in dollars, $r$ is the interest rate (a 10 percent interest rate means $r = 0.1$), and $P \cdot Y$ is national income. Assume that $P \cdot Y$ is initially 5,000.
   a. Graph the amount of money demanded (on the horizontal axis) against the interest rate (on the vertical axis).
   b. Suppose the money supply ($M^s$) is set by the central bank at $10,000. On the same graph you drew for part a., add the money supply curve. What is the equilibrium rate of interest? Explain how you arrived at your answer.
   c. Suppose income rises from $P \cdot Y = 5,000$ to $P \cdot Y = 7,500$. What happens to the money demand curve you drew in part a.? Draw the new curve if there is one. What happens to the equilibrium interest rate if the central bank does not change the supply of money?
   d. If the central bank wants to keep the equilibrium interest rate at the same value as it was in part b., by how much should it increase or decrease the supply of money given the new level of national income?
   e. Suppose the shift in part c. has occurred and the money supply remains at $10,000$ but there is no observed change in the interest rate. What might have happened that could explain this?

Q2 State whether you agree or disagree with the following statements and explain why.
   a. When the real economy expands ($Y$ rises), the demand for money expands. As a result, households hold more cash and the supply of money expands.
   b. Inflation, a rise in the price level, causes the demand for money to decline. Because inflation causes money to be worth less, households want to hold less of it.
   c. If the Fed buys bonds in the open market and at the same time we experience a recession, interest rates will no doubt rise.
Q3. Illustrate the following situations using supply and demand curves for money:

a. The Fed buys bonds in the open market during a recession.

b. During a period of rapid inflation, the Fed increases the reserve requirement.

c. The Fed acts to hold interest rates constant during a period of high inflation.

d. During a period of no growth in GDP and zero inflation, the Fed lowers the discount rate.

e. During a period of rapid real growth of GDP, the Fed acts to increase the reserve requirement.