

## Multiple-Choice Questions

Time—1 hour and 10 minutes

60 questions

For the multiple-choice questions that follow, select the best answer.

1. Which of the following statements are true of production possibility frontiers and trade between nations?
  - a. Nations specialize and trade based on comparative advantage in production.
  - b. Free trade allows each nation to consume beyond the production possibility frontier.
  - c. The flow of goods and services is based on the principle of absolute advantage.
  - d. Nations can consume at points beyond the production possibility frontier by protecting domestic industries from free trade.
  - e. I and II only
  - f. II and III only
  - g. III and IV only
  - h. I, II, and III only
  - i. I, II, III, and IV
2. A nation is producing at a point inside of its production possibility frontier. Which of the following is a possible explanation for this outcome?
  - a. This nation has experienced a permanent decrease in its production capacity.
  - b. This nation has experienced slower than usual technological progress.
  - c. This nation has avoided free trade between other nations.
  - d. This nation is experiencing an economic recession.
  - e. This nation's economy is centrally planned.
3. How would fiscal and monetary policymakers combine spending, tax, and monetary policy to fight a recessionary gap, while avoiding large budget deficits?

	SPENDING POLICY	TAX POLICY	MONETARY POLICY
(A)	Higher spending	Lower taxes	Sell Treasury securities
(B)	Lower spending	Higher taxes	Buy Treasury securities
(C)	Lower spending	Lower taxes	Increasing the reserve ratio
(D)	Higher spending	Higher taxes	Lowering the discount rate
(E)	Higher spending	Higher taxes	Sell Treasury securities

4. Corn is exchanged in a competitive market. Which of the following definitely increases the equilibrium price of corn?
  - a. Both supply and demand shift rightward.
  - b. Both supply and demand shift leftward.
  - c. Supply shifts to the right; demand shifts to the left.
  - d. Supply shifts to the left; demand shifts to the right.
  - e. The government imposes an effective price ceiling in the corn market.
5. An increase in the Consumer Price Index is commonly referred to as
  - a. economic growth.
  - b. inflation.

- c. unemployment.
  - d. discouraged workers.
  - e. deflation.
6. Which of the following is characteristic of a centrally planned economic system?
- a. Resources are allocated based on relative prices.
  - b. The circular flow of goods and services minimizes the role of the federal government.
  - c. Private ownership of resources is fundamental to economic growth.
  - d. Government planners decide how best to produce goods and services.
  - e. Efficiency is superior to the market economic system.
7. The government has just lowered personal income taxes. Which of the following best describes the effects that this policy has on the economy?
- a. Higher disposable income, higher consumption, higher real GDP, lower unemployment.
  - b. Higher disposable income, lower consumption, higher real GDP, lower unemployment.
  - c. Lower disposable income, higher consumption, higher real GDP, lower unemployment.
  - d. Lower disposable income, lower consumption, lower real GDP, higher unemployment.
  - e. Higher disposable income, higher consumption, higher real GDP, higher unemployment.
8. Which of the following are harmed by unexpectedly high rates of inflation?
- a. Borrowers repaying a long-term loan at a fixed interest rate.
  - b. Savers who have put their money in long-term assets that pay a fixed interest rate.
  - c. Workers who have negotiated cost-of-living raises into their contracts.
  - d. Persons living on fixed incomes.
  - e. I and III only
  - f. II and III only
  - g. II and IV only
  - h. I, II, and IV only
  - i. II, III, and IV only
9. Which of the following statements are true?
- a. The velocity of money is equal to real GDP divided by the money supply.
  - b. Dollars earned today have more purchasing power than dollars earned a year from today.
  - c. The supply of loanable funds consists of investors.
  - d. I only
  - e. II only
  - f. III only
  - g. I and II only
  - h. I, II, and III
10. If your nominal income rises 4 percent and your real income falls 1 percent, by how much did the price level change?
- a. 5 percent decrease
  - b.  $\frac{1}{4}$  percent increase
  - c. 3 percent increase
  - d. 3 percent decrease
  - e. 5 percent increase
11. Which of the following best measures changes in the price level of national product?
- a. The consumer price index.
  - b. The real interest rate.
  - c. The unemployment rate.
  - d. The producer price index.
  - e. The GDP deflator.
12. Which of the following lessens the impact of expansionary fiscal policy?
- a. An increase in the marginal propensity to consume.
  - b. Lower interest rates that cause a decrease in net exports.
  - c. Higher interest rates that cause an increase in net exports.

- d. Higher interest rates that decrease private investment.
  - e. Falling price levels.
13. Suppose that the unemployment rate falls from 6 percent to 5 percent and the inflation rate falls from 3 percent to 2 percent. Which of the following best explains these trends?
- a. An increase in aggregate demand.
  - b. A decrease in both aggregate demand and aggregate supply.
  - c. An increase in both aggregate demand and aggregate supply.
  - d. An increase in aggregate supply.
  - e. An increase in aggregate demand and a decrease in aggregate supply.
14. Which of the following scenarios best describes the concepts of scarcity and opportunity cost?
- a. As a birthday present, your cousin sends you a \$20 bill.
  - b. Your state government, in order to increase support for higher education, must increase the sales tax to keep the budget balanced.
  - c. Your state government, in order to increase support for higher education, must cut spending for environmental protection to keep the budget balanced.
  - d. The local fire department conducts a raffle to raise funds for new equipment.
  - e. Smoke from a forest fire impairs air quality in a small mountain town.
15. Some economists believe that when aggregate demand declines, prices are inflexible or "sticky" in the downward direction. This implies that the aggregate supply curve is
- a. upward sloping at full employment.
  - b. horizontal below full employment.
  - c. vertical at full employment.
  - d. vertical below full employment.
  - e. vertical above full employment.
16. Which of the following policies best describes supply-side fiscal policy?
- a. An increase in the money supply.
  - b. Increased government spending.
  - c. Lower taxes on research and development of new technology.
  - d. Lower taxes on household income.
  - e. More extensive government social welfare programs.
17. A likely cause of falling Treasury bond prices might be
- a. expansionary monetary policy.
  - b. contractionary monetary policy.
  - c. a depreciating dollar.
  - d. fiscal policy designed to reduce the budget deficit.
  - e. a decrease in the money demand.
18. The economy is currently operating at full employment. Assuming flexible wages and prices, how would a decline in aggregate demand affect GDP and the price level in the short run, and GDP and the price level in the long run?

	SHORT-RUN GDP	SHORT-RUN PRICE LEVEL	LONG-RUN GDP	LONG-RUN PRICE LEVEL
(A)	Falls	Falls	No change	Falls
(B)	Falls	Falls	Falls	Falls
(C)	No change	Falls	No change	No change
(D)	Falls	Falls	No change	No change
(E)	Falls	Falls	Falls	Falls

19. In the long run, aggregate supply is
- a. upward sloping at full employment.

- b. horizontal below full employment.
  - c. vertical at full employment.
  - d. vertical below full employment.
  - e. vertical above full employment.
20. What does the presence of discouraged workers do to the measurement of the unemployment rate?
- a. Discouraged workers are counted as "out of the labor force," thus understating the unemployment rate, making the economy look stronger than it is.
  - b. Discouraged workers are counted as "out of the labor force," thus overstating the unemployment rate, making the economy look weaker than it is.
  - c. Discouraged workers are not surveyed so there is no impact on the unemployment rate.
  - d. Discouraged workers are counted as "unemployed," thus understating the unemployment rate, making the economy look stronger than it is.
  - e. Discouraged workers are counted as "unemployed," thus overstating the unemployment rate, making the economy look weaker than it is.
21. Which of the following is true of the complete circular flow model of an open economy?
- a. All goods and services flow through the government in exchange for resource payments.
  - b. There is no role for the foreign sector.
  - c. Households supply resources to producers in exchange for goods and services.
  - d. Producers provide goods and services to households in exchange for the costs of production.
  - e. The government collects taxes from firms and households in exchange for goods and services.
22. Which of the following most likely increases aggregate demand in the United States.?
- a. An American entrepreneur founds and locates a software company in London.
  - b. The U.S. military relocates a military base from San Diego to Seattle.
  - c. The Chinese government makes it increasingly difficult for American firms to export goods to China.
  - d. A Mexican entrepreneur founds and locates a software company in St. Louis.
  - e. The Canadian government cancels an order for airliners from a firm located in Seattle.
23. When both aggregate supply and aggregate demand increase, which of the following can be said for certain?
- a. The price level rises, but real GDP falls.
  - b. Both the price level and real GDP rise.
  - c. The price level rises, but the change in real GDP is uncertain.
  - d. The price level falls, but real GDP rise.
  - e. Real GDP rises, but the change in the price level is uncertain.
24. When nominal GDP is rising, we would expect money demand to
- a. increase as consumers demand more money as a financial asset, increasing the interest rate.
  - b. increase as consumers demand more money for transactions, increasing the interest rate.
  - c. decrease as the purchasing power of the dollar is falling, decreasing the interest rate.
  - d. decrease as consumers demand more money for transactions, increasing the interest rate.
  - e. increase as consumers demand more money as a financial asset, decreasing the interest rate.
25. Which of the following tends to increase the spending multiplier?
- a. An increase in the marginal propensity to consume.
  - b. A decreased velocity of money.
  - c. An increase in the marginal propensity to save.
  - d. An increase in the real interest rate.
  - e. An increase in the price level.
26. Households demand more money as an asset when
- a. nominal GDP falls.
  - b. the nominal interest rate falls.
  - c. bond prices fall.
  - d. the supply of money falls.
  - e. nominal GDP increases.
27. Which of the following represents a combination of contractionary fiscal and expansionary monetary policy?

FISCAL POLICY	MONETARY POLICY
(A) Higher taxes	Selling Treasury securities
(B) Lower taxes	Buying Treasury securities
(C) Lower government spending	Increasing the reserve ratio
(D) Lower government spending	Increasing the discount rate
(E) Higher taxes securities	Buying Treasury securities

28. Higher levels of consumer wealth and optimism would likely have which of the following changes in the market for loanable funds?

MARKET FOR LOANABLE FUNDS	INTEREST RATE
(A) Increase in supply	Rising
(B) Increase in demand	Rising
(C) Decrease in demand	Falling
(D) Decrease in supply	Falling
(E) Decrease in supply	Rising

29. Investment demand most likely increases when
- real GDP increases.
  - the cost of acquiring and maintaining capital equipment rises.
  - investor optimism improves.
  - the real rate of interest rises.
  - taxes on business investment rise.
30. At the peak of a typical business cycle, which of the following is likely the greatest threat to the macroeconomy?
- Unemployment
  - Bankruptcy
  - Declining labor productivity
  - Falling real household income
  - Inflation
31. Suppose that households increase the demand for U.S. Treasury bonds as financial assets. Which of the following accurately describes changes in the money market, the interest rate, and the value of the dollar in foreign currency markets?

	<b>MONEY MARKET</b>	<b>INTEREST RATE</b>	<b>DOLLAR</b>
(A)	Increased supply	Rising	Appreciates
(B)	Increased demand	Rising	Appreciates
(C)	Decreased demand	Falling	Appreciates
(D)	Decreased supply	Falling	Depreciates
(E)	Decreased demand	Falling	Depreciates

32. If households are more optimistic about the future, how would the consumption function be affected?
- The marginal propensity to consume would increase, increasing the slope of the consumption function.
  - The entire consumption function would shift downward.
  - The entire consumption function would shift upward.
  - The marginal propensity to consume would decrease, increasing the slope of the consumption function.
  - The marginal propensity to consume would increase, decreasing the slope of the consumption function.
33. U.S. real GDP most likely falls when
- tariffs and quotas are removed.
  - investment in human capital is high.
  - the money supply is increased.
  - there is a trade surplus in goods and services.
  - the value of the dollar, relative to foreign currencies, is high.
34. If current real GDP is \$5000, and full employment real GDP is at \$4000, which of the following combinations of policies might have brought the economy to this point?
- A decrease in taxes and a lower discount rate.
  - An increase in government spending and an increase in taxes.
  - A decrease in taxes and selling bonds in an open market operation.
  - An increase in government spending and an increase in the discount rate.
  - A decrease in taxes and a decrease in government spending.
35. If a nation is operating at full employment, and the central bank engages in contractionary monetary policy, the nation can expect the interest rate, the purchases of new homes, and the unemployment rate to change in which of the following ways?

	<b>INTEREST RATES</b>	<b>NEW HOMES</b>	<b>UNEMPLOYMENT RATE</b>
(A)	Decrease	Increase	Increase
(B)	Decrease	Decrease	Decrease
(C)	Increase	Decrease	Decrease
(D)	Increase	Decrease	Increase
(E)	Increase	Increase	Increase

36. Expansionary monetary policy is designed to
- lower the interest rate, increase private investment, increase aggregate demand, and increase domestic output.
  - lower the interest rate, increase private investment, increase aggregate demand, and increase the unemployment rate.
  - increase the interest rate, increase private investment, increase aggregate demand, and increase domestic output.
  - increase the interest rate, decrease private investment, increase aggregate demand, and increase domestic output.

- e. increase the interest rate, decrease private investment, decrease aggregate demand, and decrease the price level.
37. If the economy is experiencing an inflationary gap, which of the following is most likely to worsen the problem?
- a. An increase in government spending matched by an equal increase in taxes.
  - b. An increase in government spending with no change in taxes.
  - c. A decrease in government spending and a matching increase in taxes.
  - d. A decrease in taxes with no change in government spending.
  - e. A decrease in government spending matched by an equal decrease in taxes.
38. Which of the following is a component of the *M1* measure of money supply?
- a. Savings deposits
  - b. Gold bullion
  - c. Cash and coins
  - d. 30-year Treasury certificates
  - e. 18-month certificates of deposits
39. Assuming that households save a proportion of disposable income, which of the following relationships between multipliers is correct?
- a. Tax multiplier > Spending multiplier > Balanced budget multiplier.
  - b. Spending multiplier = Tax multiplier > Balanced budget multiplier.
  - c. Spending multiplier > Tax multiplier = Balanced budget multiplier.
  - d. Spending multiplier > Tax multiplier > Balanced budget multiplier.
  - e. Tax multiplier > Spending multiplier = Balanced budget multiplier.
40. The fractional reserve banking system's ability to create money is lessened if
- a. households that borrow redeposit the entire loan amounts back into the banks.
  - b. banks hold excess reserves.
  - c. banks loan all excess reserves to borrowing customers.
  - d. households increase checking deposits in banks.
  - e. the Federal Reserve lowers the reserve ratio.
41. All else equal, when the United States exports more goods and services,
- a. the value of the dollar falls as the supply of dollars increases.
  - b. the value of the dollar rises as demand for dollars increases.
  - c. the value of the dollar falls as demand for dollars decreases.
  - d. the value of the dollar rises as the supply of dollars increases.
  - e. the value of the dollar falls as demand for dollars increases.
42. If the reserve ratio is 10 percent and a new customer deposits \$500, what is the maximum amount of money created?
- a. \$500
  - b. \$4500
  - c. \$5000
  - d. \$50
  - e. \$5500
43. Suppose today's headline is that private investment has decreased as a result of an action by the Federal Reserve. Which of the following choices is the most likely cause?
- a. Selling Treasury securities to commercial banks.
  - b. Lowering of the discount rate.
  - c. Decreasing the reserve ratio.
  - d. Elimination of a corporate tax credit on investment.
  - e. A stronger stock market has increased investor optimism.
44. If \$1000 is deposited into a checking account and excess reserves increase by \$700, the reserve ratio must be:
- a. 70%
  - b. 30%
  - c. 40%
  - d. 90%
  - e. 75%

45. Suppose a nation is experiencing an annual budget surplus and uses some of this surplus to pay down part of the national debt. One potential side effect of this policy would be
- increase interest rates and throw the economy into a recession.
  - increase interest rates and depreciate the nation's currency.
  - decrease interest rates and risk an inflationary period.
  - decrease interest rates and throw the economy into a recession.
  - decrease interest rates and appreciate the nation's currency.
46. Which of the following best describes a key difference between the short-run and long-run aggregate supply curve?
- Short-run aggregate supply is upward sloping as nominal wages quickly respond to price level changes.
  - Long-run aggregate supply is upward sloping as nominal wages quickly respond to price level changes.
  - Short-run aggregate supply is vertical as nominal wages quickly respond to price level changes.
  - Short-run aggregate supply is upward sloping as nominal wages do not quickly respond to price level changes.
  - Long-run aggregate supply is vertical as nominal wages do not quickly respond to price level changes.
47. The "crowding out" effect refers to which of the following?
- Lower interest rates that result from borrowing to conduct expansionary monetary policy.
  - Higher interest rates that result from borrowing to conduct contractionary fiscal policy.
  - Higher interest rates that result from borrowing to conduct expansionary fiscal policy.
  - Higher interest rates due to borrowing to conduct contractionary monetary policy.
  - Lower interest rates due to borrowing to conduct expansionary fiscal policy.
48. Which of the following is a predictable consequence of import quotas?
- Increased competition and lower consumer prices.
  - Increased government tax revenue from imported goods.
  - Rising net exports and a rightward shift in aggregate supply.
  - An improved allocation of resources away from inefficient producers and lower consumer prices.
  - Higher consumer prices and a misallocation of resources away from efficient producers.
49. If the Federal Reserve was concerned about the "crowding out" effect, they could engage in
- expansionary monetary policy by lowering the discount rate.
  - expansionary monetary policy by selling Treasury securities.
  - contractionary monetary policy by raising the discount rate.
  - contractionary monetary policy by lowering the discount rate.
  - expansionary monetary policy by raising the reserve ratio.
50. Which of the following would likely contribute to faster rates of economic growth?
- A more restrictive immigration policy.
  - Negative net investment.
  - Higher taxes on households and firms.
  - Higher government funding of research on clean energy supplies.
  - Protective trade policies.
51. A nation that must consistently borrow to cover annual budget deficits risks
- a depreciation of the nation's currency as foreigners increase investment in the nation.
  - a decline in net exports as the nation's goods become more expensive to foreign consumers.
  - lower interest rates that discourage foreign investment in the nation.
  - an appreciation of the nation's currency as foreigners decrease investment in the nation.
  - lower interest rates that reduce private investment in productive capital.
52. Economic growth is best described as
- an increase in the production possibility frontier and an increase in the natural rate of unemployment.
  - an increase in the production possibility frontier and a leftward shift in long-run aggregate supply.
  - a decrease in the production possibility frontier and a rightward shift in long-run aggregate supply.
  - a decrease in the production possibility frontier and a leftward shift in long-run aggregate supply.
  - an increase in the production possibility frontier and a rightward shift in long-run aggregate supply.
53. Which of the following is true of automatic fiscal policy stabilizers?
- For a given level of government spending, they produce a deficit during a recession and a surplus during an expansion.



- b. They serve to prolong recessionary and inflationary periods.
  - c. The regressive tax system is a fundamental component of automatic stabilizers.
  - d. For a given level of government spending, they produce a surplus during a recession and a surplus during an expansion.
  - e. They lengthen the business cycle.
54. Which of the following is an example of expansionary monetary policy for the Federal Reserve?
- a. Increasing the discount rate.
  - b. Increasing the reserve ratio.
  - c. Buying Treasury securities from commercial banks.
  - d. Lowering income taxes.
  - e. Removal of import quotas.
55. Labor productivity and economic growth increase if
- a. a nation subsidizes education for all citizens.
  - b. a nation imposes tariffs and quotas on imported goods.
  - c. a nation removes penalties for firms that pollute natural resources.
  - d. a nation ignores societal barriers like discrimination.
  - e. a nation taxes income from interest on saving.
56. The short-run Phillips curve depicts the \_\_\_\_ relationship between \_\_\_\_ and \_\_\_\_.
- a. positive, price level, interest rate
  - b. negative, interest rate, private investment
  - c. negative, the inflation rate, the unemployment rate
  - d. positive, price level, real GDP
  - e. negative, interest rate, money demand
57. A negative, or contractionary, supply shock will
- a. shift the Phillips curve to the left.
  - b. shift the investment demand curve to the right.
  - c. shift the money demand curve to the right.
  - d. shift the money supply curve to the left.
  - e. shift the Phillips curve to the right.
58. When a nation is operating at the natural rate of employment,
- a. there is no cyclical unemployment.
  - b. the inflation rate is zero.
  - c. there is no structural unemployment.
  - d. the nation is experiencing a recession.
  - e. the unemployment rate is zero.
59. Which of the following likely results in a permanent increase in a nation's productive capacity?
- a. A decline in the birth rate.
  - b. Declining adult literacy rates.
  - c. Widespread relocation of manufacturing firms to low-wage nations.
  - d. National program of child immunization.
  - e. A global increase in the price of crude oil.
60. Lower interest rates in the United States cause the value of the dollar and exports to change in which of the following ways?

	VALUE OF THE DOLLAR	U.S. EXPORTS
(A)	Increasing	Increasing
(B)	Increasing	Decreasing
(C)	Decreasing	Increasing
(D)	Decreasing	Unchanged
(E)	Increasing	Increasing

## Answers and Explanations

1. **A**—The gains from free trade are based upon the principles of comparative advantage and specialization. Free trade allows nations to consume at points beyond their own PPF. In this way, free trade improves the economic well being of trading nations.
2. **D**—Points within the PPF imply unemployed resources and this is indicative of a recession.
3. **D**—Balanced budget fiscal policy to eliminate a recession could increase spending and pay for that spending with higher taxes. Coordination of monetary policy requires some expansion of the money supply.
4. **D**—Combining a leftward supply shift with a rightward demand shift unambiguously raises the price.
5. **B**—Computing the change in the CPI is the most common way to measure price inflation.
6. **D**—A centrally planned economy decides which goods are needed and how best to provide them to the population. Resources are allocated and goods are distributed by the government, not the price system.
7. **A**—Lower taxes increase disposable income. Consumers spend most of this disposable income, which increases real GDP and lowers the unemployment rate.
8. **C**—Savers receive interest payments in "cheap" dollars and fixed income recipients lose purchasing power of their pensions due to rapid inflation.
9. **B**—Choice I is incorrect because the equation of exchange defines the velocity of money as nominal GDP divided by money supply. The supply of loanable funds includes savers, not investors.
10. **E**—The %D in real income is equal to the %D in nominal income less the rate of inflation.
11. **E**—The GDP deflator is a price index for all goods and services that go into national product. It is more inclusive than the CPI (consumer goods) and the PPI (producer inputs).
12. **D**—Expansionary fiscal policy can be weakened if government borrowing drives up interest rates and diminishes private investment.
13. **D**—If the unemployment rate and inflation rate are both falling, they are likely the result of an increase in AS.
14. **C**—Scarce resources require that difficult decisions be made. Something may be gained, but at the cost of something that was given up and this scenario illustrates the opportunity cost of increased funding for higher education.
15. **B**—If AD is falling and prices are not also falling, the AS curve must be horizontal. Keynesians believe that prices are sticky in the downward direction, but Classical economists believe prices are flexible. It is no surprise that the classical AS curve is vertical.
16. **C**—Supply-side fiscal policy tries to boost investment and productivity to increase AS and foster economic growth over time.
17. **B**—Falling bond prices correspond to rising interest rates so look for the choice that increases interest rates. Lower money demand, one financial asset, creates rising demand for bonds, an alternative financial asset. Choice E therefore increases bond prices and lowers interest rates.
18. **A**—If prices and wages are flexible, the long-run economy readjusts to full employment. Falling AD lowers the price level and real GDP in the short run, but eventually lower wages shift the short-run AS curve to the right, further lowering the price level and moving long-run production back to full employment.
19. **C**—The short-run AS curve is upward sloping, the long-run AS is vertical at full employment.
20. **A**—The BLS only counts a worker as "unemployed" if he is actively seeking work. A discouraged worker is, by definition, not seeking work and so his omission from the unemployment rate understates this measure of economic health, making the economy look better than it is.
21. **E**—In the full circular flow model, the role of government is to collect taxes from firms and households in exchange for goods and services. Choice C is tempting, but households supply resources in exchange for wages, which they then use to purchase goods and services.
22. **D**—All production done in the United States is counted in U.S. GDP, regardless of the nationality of the entrepreneur.
23. **E**—Increased AS lowers the price level, but increased AD increases the price level. The change in the price level is uncertain, but real GDP rises.
24. **B**—The transaction demand for money rises with higher levels of nominal GDP. With a fixed supply of money, increased demand for money increases the interest rate as consumers sell financial assets (e.g., bonds), lowering the bond price and increasing the interest rate.
25. **A**—The spending multiplier  $M = 1/(1-MPC) = 1/MPS$  so an increase in the marginal propensity to consume increases the multiplier.
26. **B**—Asset demand for money is negatively related to the interest rate. Lower interest rates decrease the opportunity cost of holding money.
27. **E**—This is the only choice that combines contractionary fiscal and expansionary monetary policy.
28. **E**—Increased consumer wealth shifts the saving function downward. Less saving decreases the supply of loanable funds, raising the interest rate.
29. **C**—Increased optimism shifts investment demand to the right.
30. **E**—At the peak of the business cycle, the economy is very strong. Real GDP and incomes are high, unemployment is low, and the threat is a rapid increase in the price level.
31. **E**—An increase in demand for bonds as a financial asset decreases the demand for money and lowers the interest rate. A lower interest rate in the U.S. money market makes the United States a less attractive place for foreign investors to place their money. This decreased demand for dollars depreciates the value of the dollar relative to foreign currencies.
32. **C**—Greater optimism shifts the consumption function upward. The MPC is unchanged.
33. **E**—If the value of the dollar is high, it makes American goods more expensive to foreign consumers. This decreases net exports and lowers U.S. real GDP. All other choices likely increase real GDP.
34. **A**—With the economy operating beyond full employment, look for a combination of expansionary policies. All of the other choices include a contractionary policy with an expansionary policy, thus making A the most likely culprit.
35. **D**—Contractionary monetary policy increases interest rates. Higher interest rates decrease new home demand, investment spending, and AD, and increase the unemployment rate.
36. **A**—Expanding the money supply decreases the interest rate, increases investment, and stimulates AD.
37. **B**—Because the spending multiplier is larger than the tax multiplier, AD shifts further to the right when spending is increased with no change in taxes. This greatly exacerbates an already inflationary situation.
38. **C**—Because  $M1$  is the most liquid measure of money, it begins with cash and coins.
39. **D**—For a given MPC, the spending multiplier exceeds the tax multiplier, which exceeds the balanced budget multiplier, which is always 1.

40. **B**—Money creation slows if banks do not loan all excess reserves.
41. **B**—More exports means an increased demand for the dollar. Stronger demand for the dollar increases the value of the dollar.
42. **B**—The money multiplier is  $1/rr = 10$ . So a \$500 deposit creates \$450 of new excess reserves, which can multiply to \$4500 of newly created money.
43. **A**—Lower levels of investment are the result of higher interest rates so look for the choice that describes a decrease in the money supply.
44. **B**—If \$700 of a \$1000 deposit is in excess reserves, \$300 or 30 percent must have been reserved.
45. **C**—Reducing debt lowers interest rates, which increases private investment and risks inflation. Lower interest rates decrease foreign investment in the United States. Weaker demand for dollars depreciates the value of the dollar.
46. **D**—The short-run AS curve is upward sloping because when AD increases, the prices of goods and services rise faster than wages. This results in a profit opportunity for producers to increase output. In the long run, wages have time to fully respond to changes in the price level.
47. **C**—High levels of government borrowing increase the interest rate and squeeze private investors out of the investment market.
48. **E**—Quotas do not raise money for the domestic government, but they do increase prices and protect inefficient domestic producers, drawing resources away from efficient foreign producers.
49. **A**—To avoid crowding out, the Fed should increase the money supply and a lower discount rate does that.
50. **D**—Long-term investment in human capital and new technologies increases economic growth rates. Protection of a nation's natural resources and health of the citizens increases labor productivity.
51. **B**—Extensive borrowing increases the interest rate on U.S. securities. Foreign investors seek to buy dollars so that they can invest in these securities, but when the dollar appreciates, American exports become more expensive to foreign consumers and so net exports fall.
52. **E**—When a nation's productive capacity increases, the PPF and long-run AS curves both shift rightward.
53. **A**—This choice describes exactly what automatic stabilizers do. By providing automatic fiscal stimulus during a recession, they also lessen the impact of a recession by shortening the business cycle.
54. **C**—Buying securities from commercial banks puts excess reserves in the banks, which begins the money creation process.
55. **A**—Subsidized public education is an investment in human capital and greatly increases labor productivity over time. This is one of the determinants of economic growth.
56. **C**—This choice describes the negative sloping Phillips curve with the inflation rate on they axis and the unemployment rate on the x axis.
57. **E**—If AS shifts to the left, both inflation and unemployment rise, and results in a Phillips curve that is further to the right than before the supply shock.
58. **A**—At the natural rate of unemployment, there is frictional and structural unemployment, but no cyclical job loss.
59. **D**—If more children are immunized against disease, the size of the adult workforce increases and higher levels of human capital and productivity are seen over time.
60. **C**—Lower interest rates decrease the demand for the dollar, which makes U.S.-made goods more affordable to foreign consumers so exports from the United States increase.

## Free-Response Questions

**Planning time—10 minutes**

**Writing time—50 minutes**

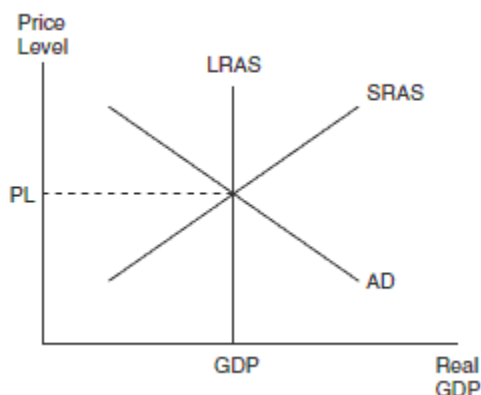
1. It is January 1, 2010, and the U.S. economy is operating at the level of real GDP that corresponds to full employment. The U.S. government is operating with a balanced budget and net exports are equal to zero.
  - a. Using a correctly labeled aggregate demand and aggregate supply graph, identify each of the following:
    - i. The current level of real GDP.
    - ii. The current price level.
  - b. Suppose that by the end of 2010 Americans are importing more goods and services from other nations than they are exporting to other nations (a trade deficit) and there exists a deficit balance in the current account.
    - i. How will this affect the balance of the capital/financial account? Explain.
    - ii. In the AD/AS graph above, show how the trade deficit will affect the U.S. economy, the level of real GDP, and the equilibrium price level.
  - c. Consider again the deficit balance in the current account.
    - i. How will the deficit balance in the current account affect the demand for the dollar in the market for dollars?
    - ii. Will the dollar appreciate or depreciate against other major foreign currencies?
  - d. Given your response to (B)(ii), how could the U.S. government engage in discretionary fiscal policy to return the economy to full employment GDP? Explain.
2. Suppose that political upheaval in Argentina has sparked rampant inflation.
  - a. Explain how this unexpected inflation would impact the following groups:
    - i. Retirees living on fixed monthly pensions.
    - ii. Banks with many outstanding loans that are being repaid at fixed interest rates.
  - b. Assume that the central bank of Argentina has the same tools of monetary policy as the Fed in the United States. Explain one monetary policy that the central bank could use to lessen the inflation.
  - c. Explain one fiscal policy that the government could use to lessen the inflation.

- d. Suppose that the inflation in Argentina is still a problem in the long run. Using a correctly labeled graph, show how the inflation would affect the value of the Argentine peso in the foreign exchange markets.
3. Assume that the United States economy is currently operating at the full employment level of real gross domestic product.
  - a. Based on this scenario, draw a correctly labeled AD/AS graph.
  - b. Suppose that full employment occurs at an unemployment rate of 4 percent, and an annual inflation rate of 3 percent.
    - i. Based upon this new information, draw correctly labeled short-run and long-run Phillips curves in a new graph.
  - c. Assume that rising global demand for oil, coal, and other nonrenewable sources of energy creates a permanent increase in the price of energy.
    - i. Show this impact on your graph in part (A). Identify changes to the equilibrium price level and real GDP.
  - d. Now assume the United States economy is back at full employment, with an unemployment rate of 4 percent and an annual inflation rate of 3 percent. The government decides to increase personal income taxes.
    - i. Identify how this will impact the United States economy, the equilibrium price level and real GDP.
    - ii. Show the impact of this increase in personal income taxes on your graph in part B.

**Note:** Based on my experience, these point allocations roughly approximate the weighting on similar questions on the AP examinations. Be aware that every year the point allocations differ and partial credit is awarded differently.

### Question 1 (11 points)

#### Part (A): 3 points



1 point is given for a downward sloping AD, an upward sloping SRAS, and a vertical LRAS all intersecting at the same point.

1. 1 point is given for labeling real GDP on the horizontal axis at the intersection of all three curves.
2. 1 point is given for labeling the price level on the vertical axis at the intersection of all three curves.

**Note:** Keep in mind my tips regarding graphs and the ways in which you can avoid losing points.

#### Part (B): 4 points

1. 2 points. 1 point is given for identifying "surplus" or "moves toward surplus" and 1 point for explaining that the existence of excess dollars from trade deficit in the hands of foreign citizens leads to an increase in the purchase of U.S. financial assets by foreigners.
2. 2 points. 1 point is given for a leftward shift in the AD curve and 1 point for showing the new intersection with SRAS and indicating the decreased level of real GDP and the decreased price level.

#### Part (C): 2 points

1. 1 point is given for stating that there will be a decrease in the demand for dollars.
2. 1 point for indicating the dollar will depreciate in value relative to other foreign currencies.

#### Part (D): 2 points

1 point is given for stating either that the government could decrease taxes or increase government spending. 1 point is given for indicating that this policy would shift AD to the right, increasing real GDP.

#### What About Partial Credit?

Partial credit differs from year to year, so you do not want to bet your perfect 5 on the generosity of unknown readers. However, it is possible that you might receive some points for being consistent with an incorrect response. For example, suppose in (C)(i) you said that the demand for the dollar would increase. You would not receive the first point. However, if you said that the dollar would then appreciate, you could receive the second point for being consistent. Another opportunity for partial credit exists in (D). Suppose that in (B)(ii) you had shown the AD curve shift to

the right. You would not receive any points in (B)(ii). However, in (D) you could describe a contractionary fiscal policy such as increasing taxes or decreasing government spending and you could receive both points in (D).

## Question 2 (6 points)

### Part (A): 2 points

- 1 point: High unexpected inflation decreases the purchasing power of pensioners.
- 1 point: Banks collect loan repayments that have lost value with high inflation.

### Part (B): 1 point

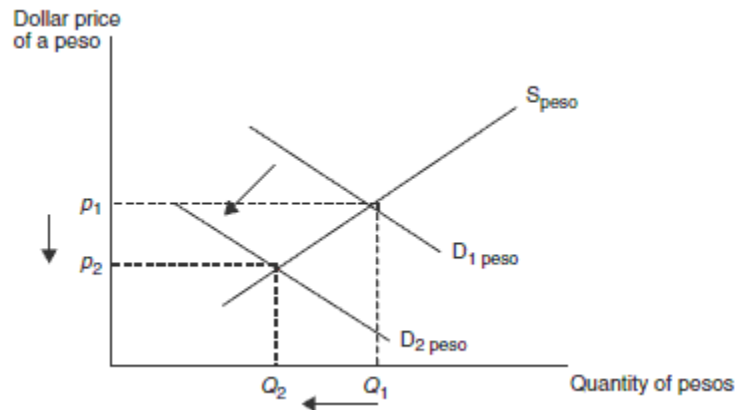
1 point is given for contractionary monetary policy. Either raising the discount rate, raising the reserve ratio or selling securities in an open market operation.

### Part (C): 1 point

1 point given for contractionary fiscal policy. Raise taxes or lower government spending.

### Part (D): 1 point

This is a graphing point. High rates of inflation decrease demand, depreciating the Argentine peso in relation to other currencies (e.g., the dollar).



## Question 3 (7 points)

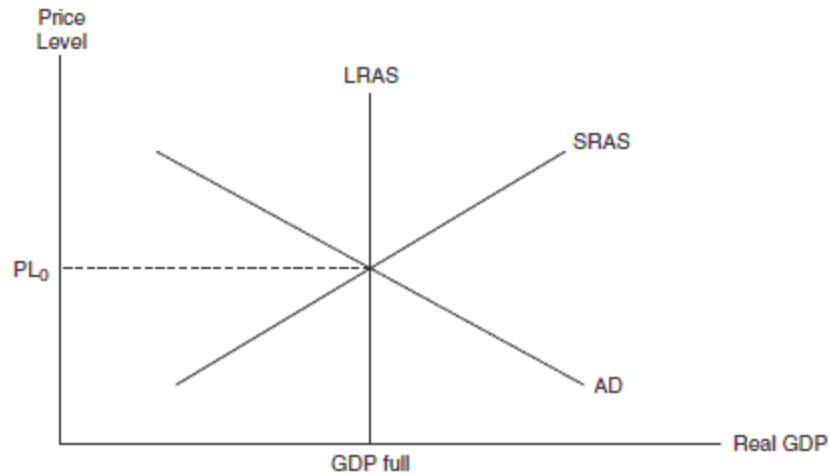
### Part (A): 2 points

These are graphing points so everything must be clearly and correctly labeled.

1 point: Real GDP and price level are clearly identified at the intersection of a downward sloping AD and upward sloping SRAS.

1 point: LRAS is drawn vertically at the intersection of AD and SRAS.

**Note:** you can also draw SRAS with the three stages as seen earlier in this text.

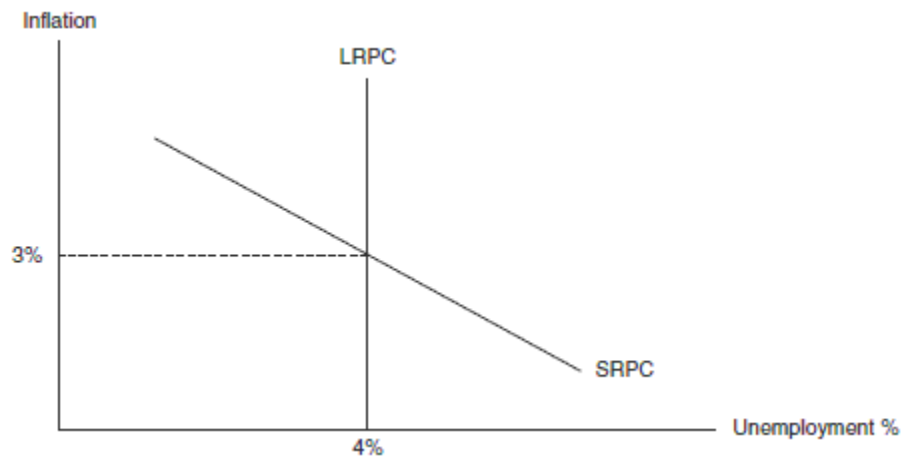


**Part (B): 2 points**

These are also graphing points but to get both points you would need to explicitly incorporate this new information in the Phillips curve graph.

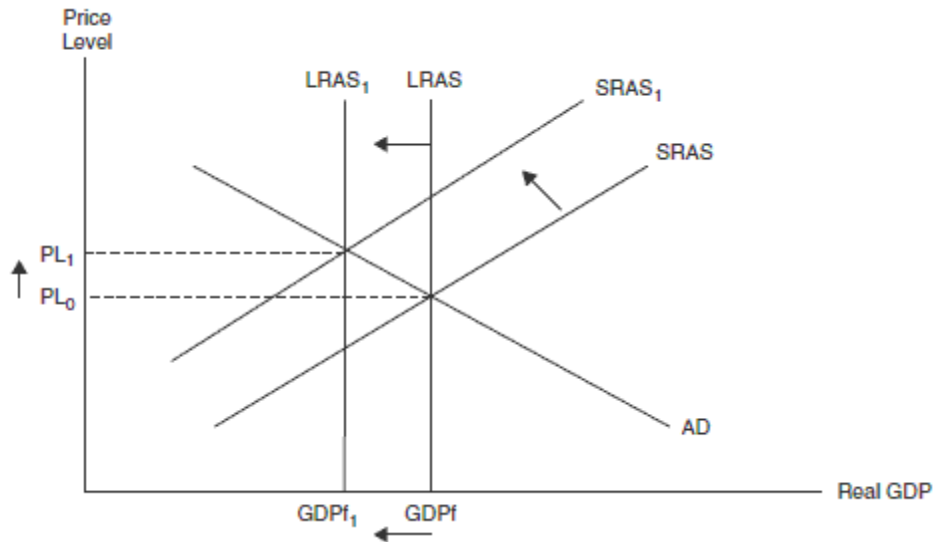
1 point: Downward sloping SRPC intersecting vertical LRPC.

1 point: Identify on the horizontal axis an unemployment rate of 4 percent and on the vertical axis an inflation rate of 3 percent.



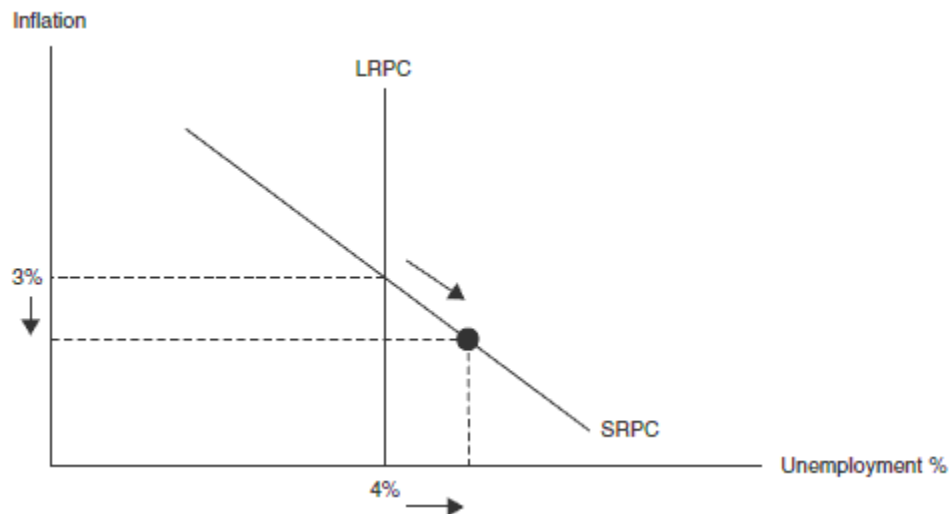
**Part (C): 1 points**

Show both the SRAS and LRAS shifting to the left in the graph from part A. Show that the equilibrium price level has risen and real GDP has fallen.



**Part (D): 2 points**

- 1 point. A short sentence would suffice so long as you identify that higher income taxes will decrease AD, decrease real GDP and decrease the price level.
- 1 point. A change in AD does not shift either Phillips curve, it causes a movement along the SRPC. The reason is that shifting AD does not cause the level of full employment, and thus the natural rate of unemployment, to change. Because unemployment is rising and the price level is falling, you would show a movement downward and to the right on the SRPC.



**Scoring and Interpretation**

**AP Macroeconomics Practice Exam 1**

**Multiple-Choice Questions:**

Number of correct answers: \_\_\_\_\_

Number of incorrect answers: \_\_\_\_\_

Number of blank answers: \_\_\_\_\_

Did you complete this part of the test in the allotted time? Yes/No

**Free-Response Questions:**

1. \_\_\_\_\_/11

2. \_\_\_\_/6

3. \_\_\_\_/7

Did you complete this part of the test in the allotted time? Yes/No

### Calculate Your Score:

#### Multiple-Choice Questions:

$$\frac{\text{____}}{(\# \text{ right})} = \frac{\text{____}}{\text{MC raw score}}$$

#### Free-Response Questions:

$$\text{Free-Response Raw Score} = (1.3636 * \text{Score \#1}) + (1.25 * \text{Score \#2}) + (1.0714 * \text{Score \#3}) = \underline{\hspace{2cm}}$$

Add the raw scores from the multiple choice and free-response sections to obtain your total raw score for the practice exam. Use the table below to determine your grade, remembering these are rough estimates using questions that are not actually from AP exams, so do not read too much into this conversion from raw score to AP score.

MACROECONOMICS #1	
RAW SCORE	APPROXIMATE AP GRADE
71–90	5
53–70	4
43–52	3
31–42	2
0–30	1