AP Economics Test:

Scarcity, Opportunity Cost, and the PPC

1. Which of the following is true if the production possibilities curve is a curved line concave to the origin?
   a. It is possible to produce more of both products
   b. The prices of the two products are the same.
   c. As more of one good is produced, more and more of the other good must be given up.
   d. Resources are perfectly sustainable between the production of the two goods.
   e. Both products are equally capable of satisfying consumer wants.

2. The crucial problem of economics is
   a. Enacting a set of laws that protects resources from overuse
   b. Allocating scarce productive resources to satisfy wants
   c. Developing a price mechanism that reflects the relative scarcities of products and resources.
   d. Providing social goods and services
   e. Establishing a fair tax system

3. The value of the best alternative forgone when a decision is made defines
   a. Economic good
   b. Opportunity cost
   c. Scarcity
   d. Trade off
   e. Comparative advantage

4. The opportunity cost of building a new high school is
   a. The expense of hiring more teachers for the new high school
   b. The expense of new desks, chalkboards, and new desks for the new high school
   c. Other goods and services, which must now be sacrificed to build the new high school
   d. Overcrowded classrooms
   e. The bond levy needed to build the new high school.

*Use the figure below for questions 5-8. It shows the PPC for a country with full employment of a given size labor force.*
5. Which of the following statements about the PPC is true?
   a. Point A is not attainable in a developed society.
   b. The relative position of Points C and D reflect production alternatives rather than relative prices.
   c. Point D is not attainable given the society’s resources.
   d. Elimination of unemployment will move the PPC to the right, closer to Point E.
   e. Point E lies outside the PPC because it represents a combination of resources not desired by the citizens of the country.

6. If the country is currently producing at Point C, it can produce more computers by doing which of the following?
   a. Moving to Point A
   b. Moving to Point B
   c. Moving to Point D
   d. Moving to Point E
   e. Remaining at Point C, since computer production is maximized.

7. How might Point E be attained?
   a. If the country’s resources were more fully employed
   b. If improvements in technology occurred in either the computer sector or the farm products sector
   c. If the country’s resources were shifted to encourage more efficient use of scarce resources
   d. If firms decreased their output of computers
   e. If the nation used more of its scarce resources to produce farm products.

8. Which of the following points would most likely lead to a rightward shift of the PPC over time?
   a. A
   b. B
   c. C
   d. D
   e. E

9. Which of the following would cause an outward or rightward shift in the PPC?
   a. An increase in unemployment
   b. An increase in inflation
   c. An increase in capital equipment
   d. A decrease in consumer demand
   e. A decrease in working age population

10. If there is an increase in demand for a good, what will most likely happen to the price and quantity of the good exchanged?

    | Price | Quantity |
    |-------|----------|
    | Increase | Increase |
    | Increase | Decrease |
    | Decrease | Decrease |
    | Decrease | Increase |
    | No change | No change |

11. According to the theory of comparative advantage, a good should be produced at the point where
   a. Its explicit costs are least
   b. Its opportunity costs are least
   c. The cost of real resources used are least
   d. Production can occur with the greatest increase in unemployment
   e. Production can occur with the lowest increase in employment.
12. The Hatfields and McCoys have been fighting for years. In the Hatfield family, a unit of cloth is worth 0.8 units of corn. At the McCoy’s, a unit of cloth is worth 1.25 units of corn. The Hatfields, however, produce more corn and cloth than the McCoys because they have higher quality resources. Despite the feud, is there a basis for specialization and trade?
   a. No, the McCoys bring no net value to the community of Hatfield and McCoy
   b. No, the opportunity costs are the same for both families.
   c. Yes, the Hatfields enjoy both a comparative and absolute advantage in cloth.
   d. Yes, the Hatfields enjoy both a comparative and absolute advantage in corn.
   e. Yes, the Hatfields enjoy both a comparative and absolute advantage in both corn and cloth.

13. Ronald wants to buy a new PS4. According to the laws of economics, Ronald will buy the PS4 if
   a. The opportunity cost is less than the purchase costs
   b. The marginal benefit is greater than the marginal costs
   c. The marginal cost is greater than the marginal benefit
   d. The marginal benefit is equal to the marginal cost
   e. None of the above.

14. Any point along the production possibilities curve is
   a. Attainable and efficient
   b. Attainable yet inefficient
   c. Unattainable and inefficient
   d. Showing that resources are not being utilized to their full potential
   e. None of the above

15. The production possibilities curve is concave because
   a. As production of goods and services increases, the opportunity cost decreases
   b. Taxes increase as the production of a good increases
   c. As production of goods and services increases, the opportunity costs increase
   d. Both B and C
   e. Both A and C

16. Scarcity is best defined as
   a. Material resources that are limited
   b. An idea used by industrializing nations to satisfy unlimited wants and desires with limited natural resources
   c. Limited vital material resources compared with limited wants and needs
   d. All points lying outside the production possibilities curve
   e. The idea that a society’s wants and needs are unlimited, and material resources are limited.

17. Mineral deposits, human capital, entrepreneurship, use of technology and machinery are all examples of
   a. Factors of production
   b. Superior and inferior goods
   c. Elements sometimes needed to move an existing company overseas
   d. Public goods
   e. Material wants and needs

18. The term *ceteris paribus* means
   a. If event A precedes event B, A caused B
   b. Economics deals with facts not values
   c. All other things equal
   d. Prosperity inevitably follows recession
   e. Out of many one
19. The production possibilities curve will show a straight line if which of the following is TRUE?
   a. The opportunity cost is constant
   b. Vital resources for the good are limitless
   c. The economy is operating below maximum efficiency and output
   d. The law of decreasing marginal utility does not apply
   e. Marginal benefit is less than marginal cost.

20. Which of the following will cause an outward shift of the production possibilities curve?
   a. Cuts in funding in educational training for employees
   b. A decrease in the nations birthrate, thus decreasing the labor force
   c. A natural disaster creating extreme limitations of a vital natural resource
   d. An increase in skilled workers
   e. None of the above.

21. Economic growth refers to
   a. A rightward shift of the production possibilities curve
   b. Movement along the supply line
   c. Movement along the supply curve
   d. The point at which supply and demand curves intersect
   e. The allocation of private property into public sectors

22. The law of increasing opportunity cost is reflected in the shape of the
   a. production possibilities curve concave to the origin
   b. production possibilities curve convex to the origin
   c. horizontal production possibilities curve
   d. straight line production possibilities curve
   e. upward sloping production possibilities curve

23. Both of the economies of the fictional nations Reilly and Tanen have the same production possibilities curve. They are both operating at the same point on the curve. If Tanen discovers a new resource for production, the most likely result of the production possibilities curves would be
   a. Tanen’s curve would shift to the right, whereas Reilly’s would stay the same
   b. Both countries’ curves would shift to the right
   c. Tanen’s curve would shift to the right, whereas Reilly’s would shift to the left.
   d. Tanen’s curve would stay the same, whereas Reilly’s would shift to the left
   e. None of the above

24. To be considered scarce, an economic resource must be which of the following
   I. Opportunity cost
   II. Production possibilities
   III. Ceteris paribus
   IV. Fallacy of composition
   I only
   b. I and II
   c. II and III
   d. I and III
   e. I, II, and III
25. Which of the following is true of the concept of increasing opportunity cost?
   a. It is unimportant in command economies because of central planning
   b. It means resources are plentiful and opportunities to produce greater amounts of goods and services are unlimited
   c. It suggests that the use of resources to produce a set of goods and services means that as more of one is produced, some of the other must be sacrificed.
   d. It suggests that unlimited wants can be fulfilled.
   e. It is irrelevant if the production possibilities curve is convex to the origin

26. If society overallocates its resources, then
   a. Consumer spending would increase due to an increase in demand
   b. Marginal benefit would be greater than marginal cost
   c. The opportunity cost of producing one more unit would increase exponentially
   d. Marginal benefit would be greater than marginal cost
   e. Marginal benefit would equal marginal cost.

27. How is it possible for a country to obtain more than its production possibilities curve dictates?
   a. Not possible without greater quantities of the factors of production already obtained.
   b. Specialization and trade
   c. Increase in education and job training
   d. Obtainment of greater quantity of affordable signatures
   e. Increase in the division of labor

28. Within the market system, prices are determined by
   a. Supply and demand
   b. Central planning committee
   c. Opportunity cost
   d. Aggregate demand
   e. Federal Reserve

29. Without government regulations, the equilibrium price is established
   a. At the next price above where the supply and demand curves intersect
   b. When the quantity supplied equals quantity demanded
   c. At the next price below where the demand and supply curves intersect
   d. When you take the difference between the two lowest points plotted on the supply and demand curves
   e. At the price where either the demand or supply curves become horizontal

30. If the demand for bowling balls increases, what could be said regarding bowling shoes?
   a. The demand for bowling shoes will decrease
   b. The demand for bowling shoes will increase
   c. The price of bowling shoes will decrease
   d. The quantity supplied will decrease
   e. None of the above
Short Free Response Questions:

31. In a recent year, the price of wheat fell. For each of the following, draw a supply and demand graph showing a decrease in prices with the stated impact on quantity.
   a. The quantity of wheat decreasing
   b. The quantity of wheat increasing
   c. The quantity of wheat staying the same

32. True, false, or uncertain and explain why? “If you won $1 million in the lottery, you wouldn’t have the economic problem of scarcity.”

Long Free Response Question:

33. Every society has the fundamental problem of scarcity.
   a. What is scarcity?
   b. What three questions must every society answer because of scarcity?
   c. What are the three ways societies have dealt with scarcity?
   d. Give one example of how each way is used in the United States.
34. A survey indicates that chocolate is Americans’ favorite ice cream flavor. For each of the following, indicate the possible effects on demand, supply, or both as well and the equilibrium price and quantity of chocolate ice cream.
   a. A severe drought in the Midwest causes dairy farmers to reduce the number of milk producing cattle in their herds by a third. These dairy farmers supply cream.

   b. A new report by the American Medical Association reveals that chocolate does, in fact, have significant health benefits.

   c. The discovery of cheaper synthetic vanilla flavoring lowers the price of vanilla ice cream.

   d. New technology for mixing and freezing ice cream lowers manufacturers’ costs of producing chocolate ice cream.
35. Suppose a fleet of alien vessels carries away a large percent of the beef cattle on earth. Use supply and demand to illustrate the impact of this on the following. Label your diagrams clearly and explain each briefly.
   a. The price and quantity of beef on earth.
   b. The price and quantity of hamburger rolls.
   c. The price and quantity of chicken (assuming that chicken is a substitute for beef).
   d. The price and quantity of vegetable beef soup.

**Test: Macroeconomic Concepts, Circular Flow, Business Cycle**

1. In the circular flow diagram, which of the following is true in resource or factor markets?
   a. Households buy resources from business firms
   b. Households sell products to business firms
   c. Households sell resources to business firms
   d. Business firms sell goods and services to households.
   e. Business firms sell resources to households.

2. Which of the following is the best measure of the production or output of an economy?
   a. Index of leading indicators
   b. Prime rate
   c. Unemployment rate
   d. Gross domestic product
   e. Consumer price index

3. Which of the following people would be considered unemployed?
   a. A person who quits work to care for aging parents.
   b. A person who stayed home to raise his children and now starts looking for a job.
c. A person who quits a job to return to school full time.

d. A person who is qualified to teach but is driving a bus until a teaching job is available

e. A person who works two part time jobs but is looking for a full time job.

4. The largest dollar amount of gross domestic product is

a. Rental payments
b. Government expenditures on goods and services
c. Profit
d. Net interest
e. Wages and salaries to employees

5. Of the following which is the best example of structural unemployment?

a. A computer programmer who quits her job to move to a warmer climate
b. A construction worker who loses his job in the winter.
c. An auto worker who loses her job during a recession
d. A steel worker who is replaced by a robot
e. A toy maker who worked for a company that closed because consumers did not buy its toys.

6. Suppose a factory added $5000 worth of output this year. Incidentally, the waste from this factory caused $1000 worth of loss to the neighboring waterways. As a result, gross domestic product will

a. Increase by $5000
b. Increase by $4000
c. Increase by $1000
d. Decrease by $4000
e. Decrease by $1000

7. When is the actual inflation rate greater than the anticipated inflation rate, which of the following is most likely to suffer?

a. Those who lend at a fixed interest rate.
b. Those who borrow at a fixed interest rate
c. Retired persons with cost-of-living adjustment in their benefits.
d. Employers who hire workers with long-term labor contracts
e. Those who lend with flexible interest rates

8. Which of the following purchases is included in the calculation of GDP?

a. A used economics textbook from the bookstore
b. New harvesting equipment for the farm
c. 1000 shares of stock in a computer firm
d. A car produced in a foreign country
e. Government bonds issued by a foreign firm

9. Which of the following would be counted as investment when calculating GDP?

a. The purchase of a used computer by an auto manufacturer
b. The purchase of a share of IBM stock by an employee
c. The construction of a new house
10. Which of the following is true if real GDP in Year 1 is $5000 and in Year 2 in $5200?
   a. Output has increased by 4%
   b. Output has declined by 4%
   c. Output change is uncertain
   d. The economy is experiencing 4% inflation
   e. The economy is experiencing a recession.
11. If you wanted to understand the relationship between households, businesses, and resources, you would study
   a. The circular flow model
   b. The equilibrium point of supply and demand
   c. Nonmarket transactions
   d. Aggregate supply
   e. Aggregate demand
12. When economists refer to the gross domestic product (GDP), they mean
   a. All final goods and services produced in an economy in a year
   b. All intermediate and final goods and services produced in an economy in a year
   c. All final goods and services produced in an economy in a five year period
   d. All final goods and services produced in an economy in a year including overseas branches and divisions
   e. The total expenditure of consumer and government spending in an economy in a given year
13. An example of a final good calculated into the GDP for the year would be
   a. A computer chip bought by Microsoft to be used in a computer
   b. A used car sold to a consumer
   c. A new car sold to a consumer
   d. The lumber used to construct a new house
   e. All of the above
14. An example of an intermediate good would be
   a. A new car sold to a consumer
   b. A car engine
   c. A new laptop
   d. A new textbook to use for a college class
   e. All of the above.
15. The fact that the government is included in the circular flow model shows that the government
   a. Provides goods and services to businesses and households.
   b. Maintains a strong control on economic resources and sells a portion of them on the open market
   c. Obtains revenues in the open market
   d. Does not provide goods and services to businesses and households.
   e. A, B, and C ONLY
16. The formula for calculating Gross Domestic Product is
a. \( C-I+G+(X-M) \)  
b. \( C+I-G-(X+M) \)  
c. \( C+G+(X-M) \)  
d. \( (C+G)(I+(X-M)) \)  
e. \( C+I+G+(X-M) \)  

17. Joe recently graduated from college with a degree in History. He is discouraged that he will not find a job due to tough economic times. He decides not to actively pursue a job but to wait for the economy to turn for the better. Joe is considered  
a. Structurally unemployed  
b. Frictionally unemployed  
c. Cyclically unemployed  
d. Seasonally unemployed  
e. Not part of the labor force  

18. Full employment occurs when  
a. Cyclical unemployment does not exist  
b. Seasonal unemployment does not exist  
c. Frictional unemployment does not exist  
d. Structural unemployment does not exist  
e. Both cyclical and frictional unemployment do not exist.  

19. Dennis decides to loan his friend some money. He would like to see a 5% return on the loan. If the current rate of inflation is 15%, what should he charge as an interest rate?  
a. 10%  
b. 20%  
c. 25%  
d. 3%  
e. 12%  

20. Nominal GDP refers to  
a. The value of current production, but using prices from a set point in time  
b. The value of current production, but using prices gathered over the past 5 years.  
c. The value of current production at current prices  
d. Prices at the peak of the business cycle  
e. The value of current production at the trough of the business cycle subtracted from that at the peak of the business cycle  

**Included or Excluded in GDP?**  

<table>
<thead>
<tr>
<th>Bubble A for INCLUDED</th>
<th>BUBBLE B for EXCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Social security payments received by a retired factory worker.</td>
<td></td>
</tr>
<tr>
<td>22. The services of a family member in painting the family home.</td>
<td></td>
</tr>
<tr>
<td>23. The income of a dentist.</td>
<td></td>
</tr>
</tbody>
</table>
24. The monthly allowance a college student receives from home.
25. Rent received on a two-bedroom apartment.

**Type of Unemployment**

A = Frictional

C = Cyclical

B = Structural

D = Seasonal
26. A teacher leaves her job to become a consultant.
27. A worker at Minute Maid Park after baseball season is over.
28. A teacher is replaced by a robot.
29. A high school graduate lacks the skills necessary for a particular job.
30. An individual refuses to work for minimum wage.

**Short Free Response**

31. You read the headline “Real GDP rises 3% this year, further increases likely next year, economists say:
   a. What does this headline mean?
   b. Why do people care about the growth in Real GDP?
   c. What is the difference between real GDP and nominal GDP?

32. The following table shows a price index for a five year period

   Index \# = \((\text{current year cost}/\text{base year cost}) \times 100\)

   a. Using 2000 as the base year, calculate the price index for each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Price Index (1999=100)</th>
<th>Price Index (2000=100)</th>
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</thead>
<tbody>
<tr>
<td>1998</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>140</td>
<td></td>
</tr>
</tbody>
</table>

   b. Assume the inflation rate is 2%. How is this rate measured and what does this rate of inflation mean to the average citizen.

33. Suppose the United States dramatically increases benefits unemployed workers. Explain what will happen to the natural rate of unemployment.
Test: Aggregate Supply and Aggregate Demand

1. The aggregate demand curve slopes downward because
   a. A higher price level makes production costs increase.
   b. It shows the amount of real output that will be purchased at each possible price level.
   c. The amount of expenditures to each production unit illustrates the amount of output.
   d. Production costs decline as real output increases.
   e. Both A and B

2. The gross domestic product is calculated in a way to avoid
   a. Double counting
   b. Clashes between the income and expenditure approach.

(a) The outputs and prices of goods and services in Country X are shown in the table above. Assuming that 2009 is the base year, calculate each of the following.
   (i) The nominal gross domestic product (GDP) in 2010
   (ii) The real GDP in 2010

(b) If in one year the price index is 50 and in the next year the price index is 55, what is the rate of inflation from one year to the next?

(c) Assume that next year’s wage rate will be 3 percent higher than this year’s because of inflationary expectations. The actual inflation rate is 4 percent. At the beginning of next year, will the real wage be higher, lower, or the same as today?

(d) Assume that Sara gets a fixed-rate loan from a bank when the expected inflation rate is 3 percent. If the actual inflation rate turns out to be 4 percent, who benefits from the unexpected inflation: Sara, the bank, neither, or both? Explain.

Indicate whether each of the following is counted in the United States gross domestic product for the year 2006. Explain each of your answers.

(a) The value of a used textbook sold through an online auction in 2006
(b) Rent paid in 2006 by residents in an apartment building built in 2000
(c) Commissions earned in 2006 by a stockbroker
(d) The value of automobiles produced in 2006 entirely in South Korea by a firm fully owned by United States citizens
c. Discrepancies between real and nominal wages  
d. Discrepancies between real and nominal GDP  
e. Economic fluctuations.  

3. The multiplier effect refers to  
   a. Government regulations that affect the GDP  
   b. Any change in aggregate expenditures always decreases GDP  
   c. Any change in aggregate expenditures creates a bigger change in GDP  
   d. The MPS will always be greater than 1  
   e. None of the above.  

4. All of the following will cause the aggregate demand to shift EXCEPT  
   a. Change in consumer income  
   b. Change in price level  
   c. A decrease in government spending  
   d. An increase in net exports  
   e. An increase in net imports  

5. Other things being equal, a shift of the aggregate supply curve to the left involves all of the following EXCEPT  
   a. An increase in government regulation  
   b. A decrease in workers wages  
   c. A decrease in the labor force  
   d. An increase in taxes  
   e. A decrease in productivity  

6. The interest rate effect suggests  
   a. A decrease in the money supply will increase interest rates  
   b. An increase in the price level will decrease the demand for money  
   c. An increase in the price level will lead consumers and businesses to borrow more money which increases the interest rate.  
   d. A decrease in the price level will lead consumers and businesses to borrow more money, which increases the interest rate.  
   e. An increase in the price level will lead consumers and businesses to borrow less money, which increases the interest rate.  

7. Which of the following describes the aggregate supply curve in the long run?  
   a. It is horizontal  
   b. It is always vertical  
   c. It is upward sloping  
   d. It is downward sloping  
   e. It is horizontal at first, then becomes upward sloping.  

8. Macroeconomic equilibrium occurs when  
   a. Full-employment GDP exceeds equilibrium GDP  
   b. Equilibrium GDP exceeds full-employment GDP  
   c. The quantity of real output demanded is equal to the quantity of real output supplied.  
   d. There is a sustained falling price level  
   e. GDP falls for a consecutive 6 months.  

9. All of the following will decrease real GDP EXCEPT  
   a. An increase in government spending  
   b. An increase in the interest rate
c. A decrease in consumer income
d. A decrease in net exports
e. All the above choices will decrease real GDP

10. Which of the following represents a positive supply shock?
   a. Discovery of new supplies of a natural resource
   b. A decrease in a natural resource
   c. A decrease in the labor force over a three year period
   d. A decrease in the price of labor
   e. All of the above

11. The best explanation why aggregate supply curve is vertical in the long run is
   a. Enough time has passed for input prices to adjust to market forces
   b. Price level and output become equal
   c. Price level and full employment become equal
   d. Output and full employment become equal
   e. The price of goods and services changes.

12. Gross domestic product is the best indicator of
   a. National income
   b. The strength of the consumer price index
   c. The strength of the Federal Reserve Bank
   d. The strength of the producer price index
   e. All of the above.

13. If the MPC is 0.6 and spending increases by $10 billion, income will
   a. Increase by $60 billion
   b. Decrease by $60 billion
   c. Increase by $25 billion
   d. Increase by $2.5 billion
   e. Remain the same

14. If the United States experienced another depression on the scale of the Great Depression of the 1930s, the government should take which of the following actions?
   a. Decrease government spending
   b. Increase government spending
   c. Increase taxes and increase government spending
   d. Decrease taxes
   e. None of the above.

15. If the MPC is 0.6, how much would the government need to spend if it desired a $25 billion increase in national income?
   a. $2.5 billion
   b. $50 billion
   c. $15 billion
   d. $5.2 billion
   e. $10 billion

16. When disposable income increases by $X,
   a. Consumption increases by more than $X
b. Saving increases by less than $X

c. Saving increases by exactly $X

d. Savings remains constant

e. Saving increases by more than $X

17. The tax multiplier increases in magnitude when
   a. The MPS increases
   b. The spending multiplier falls
   c. The MPC increases
   d. Government spending increases
   e. Taxes increase

18. The formula for the spending multiplier is
   a. (1-MPC)/MPS
   b. MPC/(1-MPS)
   c. 1/(1-MPC)
   d. 1/MPC
   e. MPC/MPS

19. If the marginal propensity to save is 0.32, what is the marginal propensity to consume?
   a. 3.13
   b. 1.32
   c. 0.68
   d. 0.47
   e. 0.5

20. If the multiplier is 3, by how much will an increase in investment spending by $400 million affect real GDP?
   a. Real GDP will rise by $533 million
   b. Real GDP will rise by $1.2 billion
   c. Real GDP will rise by $400 million
   d. Real GDP will fall by $133 million
   e. Real GDP will stay the same.

For each of the following, does each scenario affect AS or AD? Bubble A for AS and B for AD

21. The government sharply increases the minimum wage, raising the wages of many workers
22. Solar energy firms launch a major program of investment spending.
23. Congress raises taxes and cuts spending
24. Severe weather destroys crops around the world.
25. Military bases around the country are closed.
27. Economic downturns in Europe results in decreases in orders for exported goods from the United States.
28. After the recession of 2008, business investment decreased
29. A new metal is discovered allowing for cheaper computer production resulting in lower prices.
30. Halloween candy is found to be healthy for you causing a buying frenzy.
Free Response Questions

31. Determine the effect on aggregate demand of each of the following events. Explain which factor it is.
   a. A rise in the interest rate caused by a change in monetary policy
   b. A fall in the real value of money due to higher than expected inflation
   c. News of a worse-than-expected job market next year.
   d. A fall in tax rates
   e. An increase in defense spending due to increased risks.

32. Graphing Practice-AD
   a. Draw a correctly labeled graph showing aggregate demand.
   b. On your graph, illustrate an increase in aggregate demand.
   c. List the four factors that shift your aggregate demand.
   d. Describe a change for each determinant of aggregate demand that would lead to the shift you indicated in part b.

33. Graphing Practice-AS
   a. Draw a correctly labeled short-run aggregate supply curve.
   b. On your graph from part a, illustrate a decrease in short run aggregate supply.
   c. List three types of changes, that causes shifts in aggregate supply.

34. Describe the short run effects of each of the following shocks on PL and on output
   a. The government sharply increases the minimum wage
   b. Solar energy firms launch a major program of investment spending
   c. Congress raises taxes and cuts spending
   d. Severe weather destroys crops around the world.

1. Changes made to fiscal policy would involve changes in
   a. Interest rates
   b. The reserve ratio
   c. The discount rate
   d. The U.S. Constitution
   e. Taxation and government spending

2. Which of the following illustrates a contractionary fiscal policy?
   a. An increase in taxation and a decrease in government spending
   b. An increase in taxation and an increase in government spending
   c. A decrease in taxation and a decrease in government spending
   d. No change in taxation and an increase in government spending
   e. An increase in taxation and no change in government spending

3. Decreasing government spending while increasing the tax rate would be the best policy for combating
   a. A recession
   b. Inflation
   c. Structural unemployment
   d. An expansionary fiscal policy
   e. A decreasing average price level.

4. The U.S. Congress lowered taxes to aid in the recovery from a recession. This is an example of
   a. The political business cycle
   b. Contractionary business cycle
   c. Discretionary fiscal policy
d. Non-discretionary fiscal policy
e. Expansionary monetary policy.

5. If the U.S government wanted to increase aggregate demand by $50 billion and the MPS is 0.4, then it should
   a. Increase government spending by $20 billion  
b. Increase government spending by $10 billion  
c. Decrease government spending by $20 billion  
d. Decrease government spending by $10 billion  
e. Increase taxes by $20 billion

6. The crowding out effect may be avoided if
   a. The government pursues a contractionary fiscal policy  
b. Aggregate demand is increased  
c. The government destroys a percentage of the money supply  
d. The government issues new money  
e. A and D

7. A decrease in aggregate demand would be implemented by
   a. A contractionary fiscal policy  
b. No change in price levels  
c. An increase in aggregate supply  
d. A decrease in aggregate supply  
e. An expansionary fiscal policy

8. What is often a result of full employment?
   a. The rate of inflation is 0  
b. The MPS is 1  
c. The MPC is 1  
d. There is a balanced budget  
e. Inflation increases

9. The crowding out effect refers to which of the following
   a. Increases in government spending may raise the interest rate and reduce investment.  
b. Increases in government spending will shorten the recessionary gap  
c. Decreases in consumption will increase taxes.  
d. High taxes reduce savings and decrease investment.  
e. High taxes increase savings and increase investment.

10. Which fiscal policy would be the most contractionary?
    a. A $100 billion decrease in government spending  
b. A $100 billion increase in government spending  
c. A $90 billion decrease in government spending and a $10 billion decrease in taxes  
d. A $90 increase in government spending  
e. None of the above.

11. What happens to the Phillips Curve in the long run?
    a. It will become vertical  
b. It will become horizontal intersecting the LRAS.  
c. It will run parallel to the Laffer curve.  
d. It will run parallel to the SRAS  
e. None of the above

12. If there is an increase in the money supply, then it was caused by
a. A decrease in the money supply
b. The Federal Reserve Bank
c. The federal government
d. A contractionary fiscal policy
e. None of the above

13. Which of the following would be a contractionary monetary policy?
   a. Selling government securities
   b. Buying government securities
   c. Increasing spending on government projects
d. Increasing income taxes
e. Decreasing income taxes

14. What is the benefit of expansionary monetary policy?
   a. Aggregate demand will increase, but employment will decrease
   b. Aggregate demand will decrease, but employment will increase
c. Aggregate demand will increase and employment will increase
d. Aggregate supply will increase and employment will increase
e. None of the above.

15. One advantage of monetary policy over fiscal policy is
   a. The speed at which it can be implemented
   b. The regulation of taxes and government spending
c. The slow, methodical, and thoughtful pace at which it can be implemented
d. Its effectiveness on aggregate supply over aggregate demand
e. A and B

16. Suppose you read a Wall Street Journal article that states the Federal Reserve will lower the discount rate for the third time this year. According to this article, the Federal Reserve is trying to
   a. Reduce inflation
   b. Increase inflation
c. Stimulate the economy
d. Aid the U.S. Treasury
e. Increase checkable deposits.

17. For the Federal Reserve, the largest asset is
   a. Securities
   b. Loans to commercial banks
c. Federal Reserve notes
d. Deposits from the U.S. Treasury
e. All of the above

18. ________________________ fiscal policy tries to solve the problem of recession, whereas ________________________ fiscal policy tries to solve the problem of inflation.
   a. Expansionary, contractionary
   b. Contractionary, expansionary
c. Tight, easy
d. Expansionary, expansionary
e. Expansionary, tight
19. A major problem or concern with fiscal policy is
   a. Recognition lag
   b. Inflation
   c. Stagflation
   d. The swift pace at which it is implemented
   e. All of the above.

20. The average number of times per year a dollar is spent is known as
   a. The quantity theory of money
   b. Cost-push inflation
   c. Velocity of money
   d. Capital account
   e. Rate of inflation
The unemployment rate is an important indicator of the health of the United States economy.

(a) Assume that with the economy at full employment, the government implements an expansionary fiscal policy. How does the actual unemployment rate at the new short-run equilibrium compare with the natural rate of unemployment?

(b) Assume that a significant number of workers are involuntarily changed from full-time to part-time employment. Explain how this will affect the number of people who are officially classified as unemployed.

(c) Assume that the government reduces the level of unemployment compensation.
   (i) Explain how this affects the natural rate of unemployment.
   (ii) Using a correctly labeled graph, show how this affects the long-run Phillips curve.

Assume that the table below shows the unemployment and inflation data in Country X as a result of a shift in aggregate demand.

<table>
<thead>
<tr>
<th>Period</th>
<th>Unemployment Rate</th>
<th>Inflation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last year</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>This year</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

(a) Draw a correctly labeled graph of a short-run Phillips curve for Country X, showing the actual unemployment and inflation rates for both years. Label the Phillips curve as SRPC.

(b) Now assume that the short-run aggregate supply curve has shifted to the left.
   (i) Identify one factor that could cause the aggregate supply curve to shift to the left.
   (ii) On the graph, show how this shift would affect the short-run Phillips curve.

(c) Assume that the natural rate of unemployment in Country X is 5 percent. Draw a correctly labeled graph of the long-run Phillips curve and label it as LRPC.

(d) What is the relationship between the unemployment rate and the inflation rate in the long run?

Assume that the reserve requirement is 20 percent and banks hold no excess reserves.

(a) Assume that Kim deposits $100 of cash from her pocket into her checking account. Calculate each of the following.
   (i) The maximum dollar amount the commercial bank can initially lend
   (ii) The maximum total change in demand deposits in the banking system
   (iii) The maximum change in the money supply

(b) Assume that the Federal Reserve buys $5 million in government bonds on the open market. As a result of the open market purchase, calculate the maximum increase in the money supply in the banking system.

(c) Given the increase in the money supply in part (b), what happens to real wages in the short run? Explain.