NAME: Solutions

Indicate the answer choice that best completes the statement or answers the question.

1. Gross domestic product measures
   a. income and expenditures.
   A
   b. income but not expenditures.
   c. expenditures but not income.
   d. neither income nor expenditures.

2. Which of the following is not included in GDP?
   a. carrots grown in your garden and eaten by your family
   A
   b. carrots purchased at a farmer’s market and eaten by your family
   c. carrots purchased at a grocery store and eaten by your family
   d. None of the above are included in GDP.

3. A U.S. firm produces nail guns in the first quarter of 2010 and adds them to its inventory. In the second quarter of 2010 the firm sells the nail guns to a U.S. construction company. In which quarter(s) does(do) these transactions raise investment?
   a. the first and the second
   B
   b. the first but not the second
   c. the second but not the first
   d. neither the first nor the second

4. After the terrorist attacks on September 11, 2001, governments within the United States raised expenditures to increase security at airports. These purchases of goods and services are
   a. not included in GDP since they do not represent production.
   b. not included in GDP since the government collects taxes to pay for them.
   C
   c. included in GDP since government expenditures on goods and services are included in GDP.
   d. included in GDP only to the extent that the federal government, rather than state or local governments, paid for them.
5. When studying changes in the economy over time, economists want a measure of the total quantity of goods and services the economy is producing that is not affected by changes in the prices of those goods and services. In other words, economists want to study
   a. nominal GDP.
   b. real GDP.
   c. the GDP deflator.
   d. GNP.

6. The percentage change in the price level from one period to another is called
   a. the growth rate.
   b. the inflation rate.
   c. the GDP deflator.
   d. the unemployment rate.

Table 23-8

A country produces only meat and potatoes in the quantities and prices listed below. Use 2011 as the base year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Price of Potatoes</th>
<th>Quantity of Potatoes</th>
<th>Price of Meat</th>
<th>Quantity of Meat</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$2.00</td>
<td>10</td>
<td>$20</td>
<td>6</td>
</tr>
<tr>
<td>2012</td>
<td>$2.50</td>
<td>15</td>
<td>$22</td>
<td>7</td>
</tr>
<tr>
<td>2013</td>
<td>$3.50</td>
<td>20</td>
<td>$25</td>
<td>8</td>
</tr>
</tbody>
</table>

7. Refer to Table 23-8. In 2012, nominal GDP is
   a. $191.50, and real GDP is $170.
   b. $157, and real GDP is $170.
   c. $191.50, and real GDP is $157.
   d. $170, and real GDP is $227.50.

Table 23-9

A country produces only ice cream and pie. Quantities and prices of these goods for the last several years are shown below. The base year is 2008.

<table>
<thead>
<tr>
<th>Years</th>
<th>Price of Ice Cream</th>
<th>Quantity of Ice Cream</th>
<th>Price of Pie</th>
<th>Quantity of Pie</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>$2.50</td>
<td>40</td>
<td>$5.00</td>
<td>20</td>
</tr>
<tr>
<td>2009</td>
<td>$3.00</td>
<td>50</td>
<td>$6.00</td>
<td>25</td>
</tr>
<tr>
<td>2010</td>
<td>$4.00</td>
<td>40</td>
<td>$6.00</td>
<td>30</td>
</tr>
</tbody>
</table>

8. Refer to Table 23-9. In 2009, this country’s
   a. real GDP was $250, and the GDP deflator was 125.
   b. real GDP was $250, and the GDP deflator was 120.
   c. real GDP was $240, and the GDP deflator was 125.
   d. real GDP was $240, and the GDP deflator was 120.
9. **Refer to Table 23-9.** This country’s inflation rate from 2009 to 2010 to the nearest tenth was
   a. 2.9%
   b. 8.8%
   c. 13.3%
   d. None of the above is correct.

10. GDP per person tells us the income and expenditure of the
    a. richest person in the economy.
    b. poorest person in the economy.
    c. average person in the economy.
    d. entire economy.

11. The CPI is a measure of the overall cost of the goods and services bought by
    a. a typical firm.
    b. the government.
    c. a typical consumer.
    d. All of the above are correct.

12. The inflation rate is calculated
    a. by determining the change in the price index from the preceding period.
    b. by determining the change in the price index from the base year.
    c. by determining the percentage change in the price index from the preceding period.
    d. by determining the percentage change in the price index from the base year.

13. Suppose a basket of goods and services has been selected to calculate the CPI and 2014 has been selected as the base year. In 2012, the basket’s cost was $50; in 2014, the basket’s cost was $52; and in 2016, the basket’s cost was $58. The value of the CPI in 2016 was
    a. 106.0.
    b. 104.0.
    c. 111.5.
    d. 116.0.

14. The level of real GDP person
    a. differs widely across countries, but the growth rate of real GDP per person is similar across countries.
    b. is very similar across countries, but the growth rate of real GDP per person differs widely across countries.
    c. and the growth rate of real GDP per person are similar across countries.
    d. and the growth rate of real GDP per person vary widely across countries.
15. Which of the following is a determinant of productivity?
   a. human capital per worker
   b. physical capital per worker
   c. natural resources per worker
   d. All of the above are correct.

16. The traditional view of the production process is that capital is subject to
   a. constant returns.
   b. increasing returns.
   c. diminishing returns.
   d. diminishing returns for low levels of capital, and increasing returns for high levels of capital.

17. Other things the same, a country that increases its saving rate increases
   a. its future productivity and future real GDP.
   b. neither its future productivity nor future real GDP.
   c. its future productivity, but not its future real GDP.
   d. its future real GDP, but not its future productivity.

18. Institutions that help to match one person's saving with another person's investment are collectively called the
   a. Federal Reserve system.
   b. banking system.
   c. monetary system.
   d. financial system.

19. In a closed economy, what does \((Y - T - C)\) represent?
   a. national saving
   b. government tax revenue
   c. public saving
   d. private saving

20. Suppose that in a closed economy GDP is 11,000, consumption is 7,500, and taxes are 500. What value of government purchases would make national savings equal to 2,000 and at that value would the government have a deficit or surplus?
   a. 1,500, deficit
   b. 1,500, surplus
   c. 1,000, deficit
   d. 1,000, surplus
21. In 2002 mortgage rates fell and mortgage lending increased. Which of the following could explain both of these changes?
   a. The demand for loanable funds shifted rightward.
   c. The supply of loanable funds shifted rightward.
   b. The demand for loanable funds shifted leftward.
   d. The supply of loanable funds shifted leftward.

22. A larger budget deficit
   a. raises the interest rate and investment.
   c. raises the interest rate and reduces investment.
   b. reduces the interest rate and investment.
   d. reduces the interest rate and raises investment.

23. Crowding out occurs when
   a. investment declines because a budget deficit makes interest rates rise.
   b. investment declines because a budget deficit makes interest rates fall.
   c. investment increases because a budget surplus makes interest rates rise.
   d. investment increases because a budget surplus makes interest rates fall.

Figure 26-2. The figure depicts a supply-of-loanable-funds curve and two demand-for-loanable-funds curves.

24. Refer to Figure 26-2. Which of the following events would shift the demand curve from D1 to D2?
   a. The government goes from running a budget deficit to running a budget surplus.
   b. Firms become optimistic about the future and, as a result, they plan to increase their purchases of new equipment and construction of new factories.
   c. A change in the tax laws encourages people to consume less and save more.
   d. A change in the tax laws encourages people to consume more and save less.
25. Imagine that someone offers you $100 today or $200 in 10 years. You would prefer to take the $100 today if the interest rate is
   a. 4 percent.
   b. 6 percent.
   c. 8 percent.
   d. All of the above are correct.

26. A firm has three different investment options, each costing $10 million. Option A will generate $12 million in revenue at the end of one year. Option B will generate $15 million in revenue at the end of two years. Option C will generate $18 million in revenue at the end of three years. Which option should the firm choose?
   a. Option A
   b. Option B
   c. Option C
   d. The answer depends on the rate of interest, which is not specified here.

27. Economists have developed models of risk aversion using the concept of
   a. utility and the associated assumption of diminishing marginal utility.
   b. utility and the associated assumption of increasing marginal utility.
   c. income and the associated assumption of diminishing marginal wealth.
   d. income and the associated assumption of increasing marginal wealth.

28. For a risk averse person,
   a. the pleasure of winning $1,000 on a bet exceeds the pain of losing $1,000 on a bet.
   b. the pain of losing $1,000 on a bet exceeds the pleasure of winning $1,000 on a bet.
   c. the utility function exhibits the property of increasing marginal utility.
   d. the utility function gets steeper as wealth increases.

29. Mary Beth is risk averse and has $1,000 with which to make a financial investment. She has three options. Option A is a risk-free government bond that pays 5 percent interest each year for two years. Option B is a low-risk stock that analysts expect to be worth about $1,102.50 in two years. Option C is a high-risk stock that is expected to be worth about $1,200 in four years. Mary Beth should choose
   a. option A.
   b. option B.
   c. option C.
   d. either A or B because they are the same to her.

30. The logic behind the catch-up effect is that
   a. workers in countries with low incomes will work more hours than workers in countries with high incomes.
   b. the capital stock in rich countries deteriorates at a higher rate because it already has a lot of capital.
   c. new capital adds more to production in a country that doesn't have much capital than in a country that already has much capital.
   d. None of the above is correct.