1. If economic profits exist in perfect competition, in the long run firms will enter because of easy entry, the _______ curve will shift to the right, and _______ in the market will _______.
   A) supply; demand; also shift to the right
   B) supply; output; increase
   C) demand; price; increase
   D) demand; supply; fall

Use the following to answer question 2:

**Table: GDP**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal GDP</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td>Real GDP</td>
<td>360</td>
<td>480</td>
</tr>
</tbody>
</table>

2. (Table: GDP) Using the information in the table provided, calculate the GDP deflator for 2008.
   A) 90
   B) 111
   C) 96
   D) 104

3. In periods of unexpected inflation:
   A) lenders benefit since they are repaid in dollars with a higher real value.
   B) lenders benefit since the nominal interest rate does not change.
   C) borrowers benefit since they repay their loans in dollars with lower real value.
   D) neither borrowers nor lenders are affected by the inflation rate, since their nominal interest rate stays the same.
4. In the country of Sildavia, a market basket of goods and services cost $130 in 2007, $140 in 2008, and $160 in 2009. Based on this information and considering 2007 as the base year, the price index in 2009 was:
   A) 130.
   B) 100.
   C) 107.69.
   D) 123.07.

5. Unemployment rates are usually higher in Europe than in the United States because:
   A) unemployment benefits are more generous in Europe than in the United States.
   B) there are more unskilled, uneducated workers in Europe than in the United States.
   C) the minimum wage is higher in the United States than in Europe.
   D) economic policy in the United States is much more effective than European economic policy.

6. Amy just graduated from college. She recently quit her part-time job to focus on finding a full-time job that uses her skills she has acquired in college better. Amy is considered:
   A) cyclically unemployed.
   B) employed since she is focusing on finding a full-time job.
   C) frictionally unemployed.
   D) structurally unemployed.

7. Suppose the beef industry is perfectly competitive and the demand for beef rises. Then, as long as the demand does not subsequently fall, beef producers can expect to earn economic profits in both the short run and the long run.
   A) True
   B) False

8. When hyperinflation forces Emily to visit her bank very frequently to keep her cash holdings to a minimum, economists say that Emily is experiencing a(n):
   A) menu cost.
   B) unit-of-account cost.
   C) Fisher effect.
   D) shoe-leather cost.
9. Unit-of-account costs refer to the problem associated with high inflation rates that:
   A) decreases the costs associated with holding less money.
   B) causes people to expend extra effort to reduce their holdings of money.
   C) results in increased costs associated with necessary changes in the list price of items.
   D) makes money a less reliable unit of measurement.

10. Suppose life is discovered on Mars and that it turns out to be quite sophisticated. In fact, perfect competition prevails everywhere on the planet. Which of the following characteristics of Martian firms are we likely to observe?
   A) They all try to operate where price equals average variable cost.
   B) They are all price-takers.
   C) None of them ever experiences diminishing marginal returns.
   D) They all try to operate where price equals total cost.

11. People in the eastern part of Beirut are prevented by border guards from traveling to the western part of Beirut to shop for (or sell) food. This situation violates the perfect competition assumption of:
   A) ease of entry and exit.
   B) differentiated goods.
   C) price-setting behavior.
   D) a small number of buyers and sellers.

12. If the CPI is 120 in Year 1 and 150 in Year 2, then the rate of inflation from Year 1 to Year 2 is _____.
   A) 20%
   B) 25%
   C) 50%
   D) 10%

13. The actual unemployment rate in the economy is 9%. If the natural rate of unemployment is 5%, then the:
   A) cyclical unemployment rate is 4%.
   B) structural unemployment rate is 4%.
   C) cyclical unemployment rate is 14%.
   D) frictional unemployment rate is 4%.
14. A decrease in production costs for firms in a perfectly competitive market will cause a(n):
   A) increase in demand.
   B) permanent increase in price.
   C) increase in firms' marginal revenue.
   D) economic profit for firms in the short run.

Use the following to answer question 15:

**Figure: Labor Market**

15. (Figure: Labor Market) At an efficiency wage of $16, what is the unemployment rate?
   A) 27%
   B) 73%
   C) 20%
   D) 10%

16. The PPI is often regarded as a warning sign of inflation:
   A) because commodity producers can sell whatever they want at higher prices.
   B) because commodity producers are relatively quick to raise prices.
   C) because producers are more likely to have monopoly control over prices.
   D) because consumers have to pay the prices charged.

**Bonus Question (5 points):**
Who was awarded the Nobel Prize in Economics at 2013?
17. (Scenario: Market Basket) What is the rate of inflation between 2007 and 2008?
   A) 32%
   B) −10%
   C) 0%
   D) 11%

18. Kate’s Katering provides catered meals, and the catered meals industry is perfectly competitive. Kate’s machinery costs $100 per day and is the only fixed input. Her variable cost consists of the wages paid to the cooks and the food ingredients. The variable cost per day associated with each level of output is given in the accompanying table.

<table>
<thead>
<tr>
<th>Quantity of Meals</th>
<th>VC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>20</td>
<td>300</td>
</tr>
<tr>
<td>30</td>
<td>480</td>
</tr>
<tr>
<td>40</td>
<td>700</td>
</tr>
<tr>
<td>50</td>
<td>1000</td>
</tr>
</tbody>
</table>

What are the total cost (TC), the average variable cost (AVC), the average total cost (ATC), and the marginal cost (MC – from 20 to 30) for 30 quantity of output, respectively?

A) TC: $780, AVC: $16, ATC: 19.33, MC: $18
B) TC: $680, AVC: $16, ATC: 19.33, MC: $18
C) TC: $580, AVC: $26, ATC: 19.33, MC: $17
D) TC: $580, AVC: $16, ATC: 12.33, MC: $16
E) TC: $580, AVC: $16, ATC: 19.33, MC: $18
19. The economy of Britannica produces three goods: computers, DVDs, and pizza. The accompanying table shows the prices and output of the three goods for the years 2006, and 2007.

<table>
<thead>
<tr>
<th>Year</th>
<th>Computer Price</th>
<th>Computer Quantity</th>
<th>DVDs Price</th>
<th>DVDs Quantity</th>
<th>Pizza Price</th>
<th>Pizza Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>$900</td>
<td>10</td>
<td>$10</td>
<td>100</td>
<td>$15</td>
<td>2</td>
</tr>
<tr>
<td>2007</td>
<td>$1,000</td>
<td>10.5</td>
<td>$12</td>
<td>105</td>
<td>$16</td>
<td>2</td>
</tr>
</tbody>
</table>

What is the percent change in production of each of the goods from 2006 to 2007, respectively?

A) Computer: 2%, DVDs: 5%, Pizza: 1%
B) Computer: 2%, DVDs: 3%, Pizza: 0%
C) Computer: 5%, DVDs: 5%, Pizza: 0%
D) Computer: 5%, DVDs: 4%, Pizza: 1%
E) Computer: 5%, DVDs: 2%, Pizza: 0%

20. A country’s labor force is the sum of the number of employed and unemployed workers. The accompanying table provides data on the size of the labor force and the number of unemployed workers for different regions of the United States.

<table>
<thead>
<tr>
<th>Region</th>
<th>Mar-07</th>
<th>Mar-08</th>
<th>Mar-07</th>
<th>Mar-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>27,000</td>
<td>28,000</td>
<td>1,200</td>
<td>1,300</td>
</tr>
<tr>
<td>South</td>
<td>54,000</td>
<td>55,000</td>
<td>2,300</td>
<td>2,500</td>
</tr>
</tbody>
</table>

What is the number of workers employed in each of the regions in March 2007 and March 2008? Use your answers to calculate the change in the total number of workers employed between March 2007 and March 2008.

A) NE: 25,800 – 26,700 SOUTH: 51,700 - 52,500, CHANGE: NE: 900, SOUTH: 200
C) NE: 25,800 – 26,700 SOUTH: 62,700 - 55,500, CHANGE: NE: 900, SOUTH: 500
D) NE: 55,800 – 26,700 SOUTH: 51,700 - 42,500, CHANGE: NE: 800, SOUTH: 500
Answer Key

1. B
2. D
3. C
4. D
5. A
6. C
7. B
8. D
9. D
10. B
11. A
12. B
13. A
14. D
15. A
16. B
17. D