I. MULTIPLE CHOICES. Choose the one alternative that best completes the statement to answer the question.

1. The sum of which of the following would necessarily be equal to the adult population in the US statistics on labor?
   a. employed, unemployed
   b. discouraged workers, employed, unemployed
   c. employed, unemployed, not in the labor force
   d. discouraged workers, employed, not in the labor force

2. The labor force equals the
   a. number of people who are employed.
   b. number of people who are unemployed.
   c. number of people employed plus the number of people unemployed.
   d. adult population.

3. Ted is working part time. Alice is on temporary layoff. Who is counted as employed by the BLS?
   a. only Ted
   b. only Alice
   c. both Ted and Alice
   d. neither Ted nor Alice

4. Assuming everyone in the question below is in the adult population, which of the following is not correct?
   a. Elmo works part time as a baby sitter. The BLS counts him as employed and in the labor force.
   b. Anna is a full-time student not looking for a job. The BLS counts her as unemployed and in the labor force.
   c. Jim is on temporary layoff. The BLS counts him as unemployed and part of the labor force.
   d. Liz is seeking work, but has not found it. The BLS counts her as unemployed and in the labor force.
5. Which of the following definitions is correct?
   a. Labor force = number of employed.
   b. Labor force = population - number of unemployed.
   c. Unemployment Rate = (number of unemployed ÷ [number of employed + number of unemployed]) × 100.
   d. Unemployment Rate = (number of unemployed ÷ adult population) × 100.

6. The labor-force participation rate is defined as
   a. (Employed ÷ Adult Population) × 100.
   b. (Employed ÷ Labor Force) × 100.
   c. (Labor Force ÷ Adult Population) × 100.
   d. (Adult Population ÷ Labor Force) × 100.

7. Suppose that some people report themselves as unemployed when, in fact, they are working in the underground economy. If these persons were counted as employed,
   a. both the unemployment rate and labor-force participation rate would be higher.
   b. both the unemployment rate and labor-force participation rate would be lower.
   c. the unemployment rate would be higher and the labor-force participation rate would be higher.
   d. the unemployment rate would be lower and the labor-force participation rate would be unaffected.

8. Discouraged workers
   a. are not counted either as part of the adult population or as part of the labor force.
   b. are counted as part of the adult population, but not as part of the labor force.
   c. are counted as part of the adult population, and as unemployed.
   d. None the above are correct.

9. Unemployment that exists because it takes time for workers to search for the job that suits them best is
   a. frictional unemployment, which partly accounts for the natural rate of unemployment.
   b. frictional unemployment, which does not help account for the natural rate of unemployment.
   c. structural unemployment, which partly accounts for the natural rate of unemployment.
   d. structural unemployment, which does not help account for the natural rate of unemployment.
10. Bob is looking for work after school, but everywhere he fills out an application the managers say they always have a lot more applications than open positions. Tom has a law degree. Several firms have made him offers, but he thinks he might be able to find a firm where his talents could be put to better use.
   a. Bob and Tom are both frictionally unemployed.
   b. Bob and Tom are both structurally unemployed.
   c. Bob is frictionally unemployed, and Tom is structurally unemployed.
   d. Bob is structurally unemployed, and Tom is frictionally unemployed.

11. Job search
   a. explains why firms pay less than the competitive equilibrium wage.
   b. is due simply to the failure of wages to balance labor supply and labor demand.
   c. is the process of matching workers with appropriate jobs.
   d. All of the above are correct.

12. People who are unemployed because of job search are best classified as
   a. cyclically unemployed.
   b. structurally unemployed.
   c. frictionally unemployed.
   d. discouraged workers.

13. The government operates programs for job training and job information intended to reduce unemployment.
   a. Almost all economists agree that such programs are of no use.
   b. Almost all economists agree that such programs work very well.
   c. Some economists claim that the government can do these things no better than firms and individuals could do them for themselves.
   d. None of the above is correct.
14. Most economists would agree that eliminating unemployment insurance would
   a. increase unemployment because people would quit jobs they thought were not secure.
   b. increase unemployment because if the government didn't provide unemployment insurance,
      private firms would offer superior insurance.
   c. reduce unemployment and so improve economic well-being.
   d. reduce unemployment, but they disagree about whether economic well-being would be
      enhanced by such a change.

15. Which of the following creates unemployment by keeping wages above the equilibrium level?
   a. unions but not efficiency wages.
   b. efficiency wages, but not unions.
   c. neither efficiency wages nor unions.
   d. both efficiency wages and unions.

16. If the minimum wage were currently above the equilibrium wage, than a decrease in the minimum
    wage would
   a. increase both the quantity demanded and the quantity supplied of labor.
   b. decrease both the quantity demanded and the quantity supplied of labor.
   c. increase the quantity of labor demanded and decrease the quantity supplied.
   d. decrease the quantity of labor demanded and increase the quantity supplied.

17. Which of the following is not correct?
   a. A union is a form of cartel.
   b. Union workers typically earn 25 to 33 percent more than similar nonunionized workers.
   c. The power of a union comes from its ability to strike if its demands are not met.
   d. Workers in unions reap the benefits of collective bargaining, while workers not in unions bear
      some of the cost.
18. Samantha, the CEO of a corporation operating in a comparatively poor country where wages are low, decides to raise the wages of her workers even though she faces an excess supply of labor. Her decision
   a. might increase profits if it means that the wage is high enough for her workers to eat a nutritious diet that makes them more productive.
   b. will help eliminate the excess supply of labor if she raises it sufficiently.
   c. may cause her workers to increase shirking.
   d. All of the above are correct.

19. Efficiency wages refer to wages set at a level
   a. that would make the natural rate of unemployment zero.
   b. to encourage greater worker productivity.
   c. to maximize union members' total earnings.
   d. that would result in equilibrium in the labor market of each industry.
II. CALCULATIONS AND EXPLANATIONS. Compute the numbers and provide explanations when necessary.

1. The table below uses data for the year 2003 provided by the BLS and adjusted to be comparable to U.S. data. All values are in thousands. Fill in the blank entries in the table. Show your work!

<table>
<thead>
<tr>
<th>Country</th>
<th>Adult Population</th>
<th>Labor Force</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Unemployment Rate</th>
<th>Labor-Force Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>109,474</td>
<td>62,510</td>
<td>3,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>26,870</td>
<td>2,577</td>
<td></td>
<td></td>
<td>57.41</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>70,159</td>
<td>39,591</td>
<td></td>
<td>2,577</td>
<td>9.69</td>
<td></td>
</tr>
</tbody>
</table>

III. SHORT ESSAYS. Answer the following questions briefly but concisely.

1. Since unemployment rates are consistently higher in Canada and some Western European countries than in the United States, it appears that the natural rate of unemployment is lower in the United States. What might explain this difference?

2. Provide the definition of “Efficient Wages” and four reasons why firms might pay efficiency wages