MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Most of the variations in U.S. population growth have resulted from changes in
A) birthrates and net migration.  
B) birthrates and death rates.  
C) net migration and death rates.  
D) birthrates and technological change.

2) Compared to the basic work-leisure choice model, Becker's model of time allocation
A) considers the week rather than the day as the basic unit of time.  
B) considers the household rather than the individual as the basic decision-making unit.  
C) assumes that goods and services take no time to consume.  
D) considers time spent in household work as work time rather than leisure time.

3) In Becker's model of time allocation, the difference between "goods" and "commodities" is that commodities are produced
A) in markets, whereas goods are produced in households.  
B) only with housework.  
C) by combining goods with time.  
D) in the market, whereas goods are produced in the home.

4) If a worker's wage rate rises,
A) household production will shift away from goods-intensive commodities toward time-intensive commodities.  
B) household production will shift away from time-intensive commodities toward goods-intensive commodities.  
C) more leisure time will be consumed.  
D) more leisure time will be consumed if the substitution effect outweighs the income effect.

5) A household will tend to substitute goods for time in the production of commodities if
A) a household member's market wage increases.  
B) a household member's market wage decreases.  
C) the substitution effect of a wage decrease exceeds the income effect.  
D) the household's total income decreases.

6) Compared to a high-wage worker, a low-wage worker will tend to
A) pursue more goods-intensive activities.  
B) pursue more time-intensive activities.  
C) pursue fewer time-intensive activities.  
D) sacrifice time-intensive activities in favor of goods-intensive activities.
7) Which of the following best exemplifies the Becker substitution effect? An increase in the market wage leads a household to
   A) eat more fast-food meals.      B) play more golf together.
   C) have more children.           D) take fewer, but longer vacations.

8) Which of the following best exemplifies the Becker income effect? An increase in the market wage leads a household to
   A) substitute time for goods in the production of commodities.
   B) consume fewer time-intensive commodities and more goods-intensive commodities.
   C) consume more commodities.
   D) have fewer children.

9) In a particular family, both spouse A and spouse B could earn $20 per hour in market work. However, spouse A has a comparative advantage in the production of home-produced goods. Becker's model of time allocation predicts that
   A) spouse B will be better able to substitute time for goods in the production of commodities.
   B) spouse A and spouse B will divide market work and home production equally.
   C) spouse A will tend to specialize in market work, spouse B in home production.
   D) spouse A will tend to specialize in home production, spouse B in market work.

10) Which of the following is a member of the potential labor force?
    A) a 75-year-old retired autoworker living at home
    B) a 15-year-old student
    C) a 60-year-old Alzheimer's patient now living in a nursing home
    D) a 35-year-old stockbroker convicted of fraud now serving a 10-year sentence

11) The labor force consists of all persons age 16 years and over who are
    A) employed.
    B) employed or are actively seeking employment.
    C) employed, actively seeking employment, or have given up looking for employment.
    D) not institutionalized.

12) The labor force participation rate
    A) is the fraction of a given population that is classified as employed.
    B) has been rising for males and declining for females.
    C) tends to increase during a recession.
    D) is the fraction of a given population that is classified either as employed or unemployed.
13) If \( U \) represents the number of unemployed persons, \( E \) the number of employed persons, and \( N \) the number in the potential labor force that are neither unemployed nor employed, the labor force participation rate can be found as

A) \( U + E \)  
B) \( E/(U + E) \)  
C) \( (U + E)/(E + N) \)  
D) \( (U + E)/(U + E + N) \)

14) Given the following data, what is the labor force participation rate?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Population</td>
<td>300 million</td>
</tr>
<tr>
<td>Noninstitutionalized population, age 16 and over</td>
<td>250 million</td>
</tr>
<tr>
<td>Persons employed or seeking employment</td>
<td>200 million</td>
</tr>
<tr>
<td>Unemployed persons</td>
<td>10 million</td>
</tr>
</tbody>
</table>

A) 10%  
B) 75%  
C) 80%  
D) 84%

15) Given the following data, what is the labor force participation rate?

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Population</td>
<td>100 million</td>
</tr>
<tr>
<td>Noninstitutionalized population, age 16 and over</td>
<td>75 million</td>
</tr>
<tr>
<td>Persons employed or seeking employment</td>
<td>50 million</td>
</tr>
<tr>
<td>Unemployed persons</td>
<td>5 million</td>
</tr>
</tbody>
</table>

A) 50%  
B) 67%  
C) 75%  
D) 80%

16) Consider the following data

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Males in the labor force</td>
<td>100 million</td>
</tr>
<tr>
<td>Unemployed males</td>
<td>5 million</td>
</tr>
<tr>
<td>Noninstitutionalized females, age 16 and over</td>
<td>110 million</td>
</tr>
<tr>
<td>Employed or unemployed females</td>
<td>88 million</td>
</tr>
</tbody>
</table>

Given the information in the table above, the male labor force participation rate _______.  
Female labor force participation rate ________.

A) is 95%; is 80%  
B) is 95%; is 88%  
C) cannot be calculated from the data; is 80%  
D) cannot be calculated from the data; cannot be calculated from the data

17) The aggregate labor force participation rate in the U.S. is currently about

A) one-fourth.  
B) one-half.  
C) two-thirds.  
D) three-fourths.
18) Since the mid-1980s, the labor force participation rate of women has _______ and the participation rate of men has _______.  
A) risen; been unchanged.  
B) risen; fallen.  
C) fallen; risen.  
D) risen; risen.

19) Compared to fifty years ago, the labor force participation rate of 25- to 54-year-old men has ______, the participation rate of 55- to 64-year-old men has ______, and the participation rate of men age 65 and over has _______.  
A) risen; been fairly steady; risen  
B) fallen; risen; risen  
C) risen; fallen; been fairly steady  
D) been fairly steady; fallen; fallen

20) Which one of the following is not a plausible explanation of the observed change in the participation rate of males age 65 and older since World War II?  
A) growth in the percentage of the labor force covered by private pensions  
B) cutbacks in Social Security benefits  
C) the long-term growth of average real incomes and wealth  
D) the increased generosity of the disability component of Social Security

21) Which one of the following gives rise to a retirement-inducing substitution effect? As workers approach retirement age,  
A) Social Security benefits become available.  
B) wealth becomes sufficient to make retirement affordable.  
C) earnings potential decreases so that leisure becomes relatively more costly.  
D) earnings potential decreases so that leisure becomes relatively less costly.

22) Which one of the following is not predicted to increase the labor force participation rate of married women?  
A) rising wage rates for husbands  
B) rising productivity in the household  
C) declining birthrates  
D) attempts to maintain living standards

23) Cross-sectional data suggest that, all else equal,  
A) the male labor force participation rate varies inversely with education.  
B) the labor force participation rate of single women varies inversely with the reservation wage.  
C) the labor force participation rate of married men varies inversely with the number of children in the household.  
D) the labor force participation rate of married women varies inversely with the husband's income.
24) "For married women, the substitution effect of rising wage rates has apparently outweighed the income effect." Empirical evidence suggests this statement is
A) true, because the labor force participation rate of women has been increasing.
B) true, because married women have had to work to maintain household living standards.
C) not true, because the labor force participation rate of women has been increasing.
D) not true, because the labor force participation rate of women has been declining.

25) According to the textbook, each of the following factors may have contributed to increased female labor force participation except
A) rising divorce rates.
B) expanding job accessibility.
C) fewer educational opportunities.
D) a desire to maintain household living standards.

26) The secular decline in the birthrate
A) has contributed to the increased labor force participation rate of women.
B) may partly be caused by the increasing opportunity cost of children as women's wages have increased.
C) has contributed to the increased labor force participation rate of women and may partly be caused by the increasing opportunity cost of children as women's wages have increased.
D) has not contributed to the increased labor force participation rate of women and is not partly caused by the increasing opportunity cost of children as women's wages have increased.

27) Fuchs' research suggests the most important reasons for the increased labor force participation rate of women are
A) rising real wages and expansion of service sector jobs.
B) rising real wages and the feminist movement.
C) the feminist movement and passage of antidiscrimination legislation.
D) passage of antidiscrimination legislation and technological innovations in household production methods.

28) Compared to white females, the labor force participation rate of African-American females is ________. Compared to white males the labor force participation rate of African-American males is ________.
A) nearly identical; nearly identical
B) greater; lower
C) lower; greater
D) nearly identical; lower
29) In the mid 1950s, white males
   A) were more likely to participate in the labor force than were African-American males.
   B) were less likely to participate in the labor force than were African-American males.
   C) and African-American males were about equally likely to participate in the labor force and that relationship still holds.
   D) and African-American males were about equally likely to participate in the labor force but now white men have a higher participation rate.

30) Since 1950, the labor force participation rate of white women has
   A) increased until it nearly equals that of African-American women.
   B) fallen until it nearly equals that of African-American women.
   C) increased and now significantly exceeds that of African-American women.
   D) been steady since World War II.

31) Until recently, the labor force participation rate of African-American women has
    ________ the rate of white women. In recent years the labor force participation rate of African-American men has ________ the rate of white men.
    A) been slightly less than; consistently exceeded
    B) consistently exceeded; been slightly less than
    C) consistently exceeded; consistently exceeded
    D) been slightly less than; been slightly less than

32) A "supply side" explanation of the lower participation rate of African-American males compared to white males is that
    A) African-Americans command lower wage rates and are usually last-hired and first-fired.
    B) African-American workers are located in the inner city, while jobs are in the suburbs.
    C) African-American women's labor force participation rate is lower than that of white women.
    D) opportunities outside the labor market, such as Social Security and public assistance, afford comparatively more attractive alternatives to African-Americans.

33) The relatively low labor force participation rate of African-American males may be partly explained by
    A) the relatively higher participation rate of African-American females.
    B) the increased availability of public income maintenance programs.
    C) lower average wages and job prospects available to African-American males.
    D) All of the other choices are correct.
34) Which one of the following will tend to increase the likelihood of participation in the labor force for a current nonparticipant?
   A) a decrease in the spouse's wage
   B) an increase in the spouse's wage
   C) an increase in family size
   D) falling productivity in household production of commodities

35) Which one of the following statements is correct?
   A) The added-worker effect and the discouraged-worker effect operate in the same direction.
   B) The added-worker effect and the discouraged-worker effect operate in different directions.
   C) The added-worker effect is relatively strong as the economy expands and wages rise.
   D) The discouraged-worker effect is relatively strong as the economy expands and wages rise.

36) The added-worker effect suggests that
   A) higher wages will attract more persons into the labor market during market expansions.
   B) when one family member loses a job, other family members may enter the labor force.
   C) the measured unemployment rate probably understates the true economic hardship associated with unemployment.
   D) the labor force participation rate will fall as the unemployment rate rises.

37) Because of the ________, the unemployment rate as measured by the Bureau of Labor Statistics tends to **understate** the extent of unemployment during a recession.
   A) counter-cyclical labor force participation rate
   B) added-worker effect
   C) decline in the average workweek
   D) discouraged-worker effect

38) The discouraged-worker effect indicates that
   A) married women will enter the labor force to maintain household living standards after their husbands' wages have fallen.
   B) some unemployed persons in the labor force actively seek employment.
   C) some unemployed workers will decide to withdraw from the labor force as the unemployment rate increases.
   D) the labor force participation rate varies directly with the unemployment rate.
39) Empirical evidence suggests that the participation rate varies inversely with the unemployment rate. 
A) added-worker effect dominates the discouraged-worker effect; the participation rate varies inversely with the unemployment rate. 
B) discouraged-worker effect dominates the added-worker effect; the participation rate varies inversely with the unemployment rate. 
C) added-worker effect dominates the discouraged-worker effect; the participation rate varies directly with the unemployment rate. 
D) discouraged-worker effect dominates the added-worker effect; the participation rate varies directly with the unemployment rate.

40) Since the end of World War II, the average weekly hours of work in manufacturing has 
A) been steady, in part due to increased education. 
B) been steady, in part due to lower tax rates. 
C) fallen steadily. 
D) increased steadily.

41) All else equal, rising real wages will 
A) decrease average weekly work hours if the income effect exceeds the substitution effect. 
B) increase average weekly work hours if the income effect exceeds the substitution effect. 
C) decrease average weekly work hours if the substitution effect exceeds the income effect. 
D) have no impact on average weekly work hours.

42) Research suggests that the widespread use of the birth control pill 
A) accounts for over half the increase in the labor force participation rate of married women since 1950. 
B) accounts for about one-third of the increase in the share of women in professional occupations between 1970 and 1990. 
C) accounts for over two-thirds of the drop in the age of first marriage between 1970 and 1990. 
D) had no measurable impact on the labor force participation rate of women.

43) Research by Hamermesh and Lee suggests that 
A) high-income earners would be happier if they earned less. 
B) less than 10% of U.S. married couples report feeling stressed for time. 
C) although Germans work fewer hours than the Japanese, they report more time stress. 
D) all else constant, higher earnings lead to greater time stress.