

Below are the composites of the population of a country, which uses the same method to calculate the unemployment rate as the U.S. Bureau of Labor Statistics uses.

<u>Population</u>	<u>1,000,000</u>
under 16	300,000
over 16	
In military service	30,000
In hospitals	15,000
In prison	10,000
Full-time and voluntary part-time workers	460,000
Involuntary part-time workers	40,000
Searched for jobs during previous four weeks, but have not found one yet	80,000
Discouraged workers	20,000

- a. How large is the country's labor force? = $460000+40000+80000=580000$
- b. Compute the unemployment rate. = $80000/580000=13.8\%$
- c. Notice that the sum of the numbers from all the categories in the table is not 1,000,000. How are the missing citizens classified? (Full-time students, the retired, homemakers, etc.)
- d. Suppose that only half of involuntary part-time workers should be considered employed, please recalculate the unemployment rate. Half of the involuntary part-time workers are now considered unemployed. Therefore,

$$\text{Unemployment rate} = (80000+20000)/580000=17.2\%$$
- e. If discouraged workers were considered unemployed, what would be the new unemployment rate (ignoring the adjustment for involuntary part-time worker)?

Under official unemployment rate calculation, discouraged workers are not part of labor force. If discouraged workers were considered unemployed, the labor force will increase and the unemployed will increase accordingly. Therefore,

$$\text{Unemployment rate} = (80000+20000)/(580000+20000) = 100000/600000=16.7\%$$

1. With which of the following responses would the Census Bureau declare the person unemployed?
 - a. "I am currently working full-time but my employer is going to lay me off tomorrow."
 - b. "I am currently working part-time but I would like to work full-time."
 - c. "I was working at two different jobs, I lost my primary job a few weeks ago, and I am searching for a new job."
 - d. "I would love a job but I am not looking for one because I have no chance of finding one."
 - e. "I just turned 16 and I am looking for a job."

2. Workers laid off as a result of the 2007-2009 recession would suffer
 - a. Frictional unemployment
 - b. Seasonal unemployment
 - c. Cyclical unemployment
 - d. Structural unemployment

3. According to Okun's law, given that the natural unemployment rate is 5%, what would be the GDP gap if the actual unemployment is 8.1%?
 - a. 3.1%
 - b. 6.2%
 - c. 10%
 - d. 13.1%

4. Susie has lost her job in the Lordstown auto plant because of import competition. She intends to earn a degree in nursing at YSU and move to Oregon where she anticipates that a new job will be available. We can say that Susie is faced with:
 - a. seasonal unemployment.
 - b. cyclical unemployment.
 - c. structural unemployment.
 - d. frictional unemployment.

5. An example of a frictionally unemployed individual is
 - a. Rod, the lifeguard, who cannot find a job because the temperature is too low in October
 - b. Ileana, a college student who quits her job to return to school
 - c. Steve, an individual does not have skills to keep his job as an aerospace engineer
 - d. Samantha, who quits her job to look for better one

6. Some of the inaccuracies in measuring GDP are attributable to
 - a. monopolization
 - b. ignoring production by U.S.-owned plants abroad
 - c. the underground economy and quality changes
 - d. tax evasion and inflation

7. During recessions, GDP falls and unemployment increases. Why might the actual output produced not fall as much as officially measured GDP during recessions?
 - a. There is an increase in involuntary part-time employment during recessions, the output from which is not accounted for in GDP.
 - b. Workers who became unemployed during the recession may produce goods in the underground economy.
 - c. Unemployment benefits to laid off workers will allow them to purchase nearly as much output as before.
 - d. Laid off workers may start their own businesses, but profit income from self-employment is not accounted for in GDP.
 - e. Unemployed workers have more leisure time to enjoy.

8. Providing training to unemployed individuals will help to alleviate
 - a. frictional unemployment
 - b. seasonal unemployment
 - c. structural unemployment
 - d. cyclical unemployment

9. Full employment occurs when
 - a. everyone has a job
 - b. everyone who wants a job has one
 - c. there is no frictional unemployment
 - d. there is no cyclical unemployment
 - e. there is no structural, frictional, and seasonal unemployment

10. When the economy is operating at an unemployment rate below the full employment rate,
 - a. actual output is above potential output
 - b. actual output equals potential output
 - c. actual output is below potential output
 - d. frictional unemployment has been eliminated
 - e. structural unemployment has been eliminated