Homework Assignment #3 (Due 10/10, Tuesday)

Multiple Choice Questions: (Please use the green scantron to answer this part)

1) An observer of the economy notices that over the last nine months the unemployment rate has increased from 5.6 percent to 8.7 percent. During the same time the rate of growth in real gross domestic product has become negative. From this information we might conclude that
   A) inflation is probably rampant in this economy.
   B) a recession is occurring in this economy.
   C) an expansionary phase of the business cycle is in process.
   D) a peak in the business cycle will soon be reached.
   Answer: B

2) Which of the following is NOT considered to be in the labor force?
   A) A student who works part-time.
   B) A person who is not working but who has tried to find a job in the past week.
   C) A person who is waiting to start a new job in the next 30 days.
   D) A person who is not working and who has not tried to find a job.
   Answer: D

3) The labor force is defined as the number of people who
   A) are employed plus the number of people who are unemployed.
   B) are available and looking for work but are unable to find employment.
   C) would like to have a job but have stopped seeking work.
   D) would like to have a full-time job but are working part-time.
   Answer: A

4) Which of the following people is NOT considered unemployed in the Current Population Survey?
   A) The person has just finished school and has entered the labor force to look for work.
   B) The person has been laid off and is looking for a new job.
   C) The person is looking for work after not doing so for a time.
   D) The person is discouraged about finding a job and so does not search for work.
   Answer: D

5) Over the last thirty years, the labor force participation rate ____ and the employment-to-population ratio ____.
   A) increased; increased
   B) increased; decreased
   C) decreased; increased
   D) decreased; decreases
   Answer: A

6) Which of the following groups has the highest unemployment rate?
   A) White teenagers.
   B) Black teenagers.
   C) Blacks, 20 years of age or older.
   D) Whites, 20 years of age or older.
   Answer: B
<table>
<thead>
<tr>
<th>Year</th>
<th>Price index</th>
<th>Inflation rate (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>117</td>
<td>A</td>
</tr>
<tr>
<td>3</td>
<td>125</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>120</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
<td>8.3</td>
</tr>
<tr>
<td>6</td>
<td>150</td>
<td>E</td>
</tr>
</tbody>
</table>

7) In the table above, what inflation rate belongs in space A?
   A) 17.0 percent.
   B) 6.8 percent.
   C) 8.3 percent.
   D) –4.0 percent.

   **Answer: A**

8) In the table above, what price level belongs in space D?
   A) 125.
   B) 130.
   C) 140.
   D) 145.

   **Answer: B**

9) In the table above, what inflation rate belongs in space E?
   A) 17.0 percent.
   B) 6.8 percent.
   C) 8.3 percent.
   D) 15.4 percent.

   **Answer: D**

10) Price indexes can overstate inflation because they
    A) omit some quality improvements.
    B) do not contain the correct collection of goods purchased by consumers.
    C) do not contain the prices of foreign goods.
    D) do not contain the prices of services.

   **Answer: A**

11) The technique currently used to calculate the CPI implicitly assumes that over time consumers buy
    A) relatively more of goods whose relative prices are rising.
    B) relatively less of goods whose relative prices are rising.
    C) the same relative quantities of goods as in a base year.
    D) goods and services whose quality improves at the rate of growth of real income.

   **Answer: C**

12) Substitution bias in the CPI refers to the fact that the CPI
    A) takes into account the substitution of goods by consumers when relative prices change.
    B) takes no account of the substitution of goods by consumers when relative prices change.
    C) substitutes quality changes whenever they occur without taking account of the cost of the quality changes.
    D) substitutes relative prices for absolute prices of goods.

   **Answer: B**
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Books</td>
<td>10</td>
<td>$30</td>
<td>8</td>
<td>$50</td>
</tr>
<tr>
<td>Pens</td>
<td>20</td>
<td>$1</td>
<td>15</td>
<td>$2</td>
</tr>
</tbody>
</table>

13) In 2004, consumers in Dexter consumed only books and pens. The prices and quantities for 2004 and 2005 are listed in the table above. The reference base period for Dexter’s CPI is 2004. What is the cost of the CPI basket in 2004?
   A) $430
   B) $335
   C) $320
   D) $540

   Answer: C

14) In 2004, consumers in Dexter consumed only books and pens. The prices and quantities for 2004 and 2005 are listed in the table above. The reference base period for Dexter’s CPI is 2004. What is the cost of the CPI basket in 2005?
   A) $430
   B) $335
   C) $320
   D) $540

   Answer: D

15) In the short run, firms expand their production when the price level rises because
   A) the money wage rate remains constant so the higher prices for their product makes it profitable for firms to expand production.
   B) each firm must keep its production level up to the level of its rivals, and some firms will expand production as the price level increases.
   C) the higher prices allow the firm to hire more workers by offering higher wages, thereby increasing productivity and profits.
   D) firms can increase their profits by increasing their maintenance.

   Answer: A

16) Which of the following changes does NOT shift the short-run aggregate supply curve?
   A) an increase in the price level.
   B) an increase in technology.
   C) an increase in the quantity of capital.
   D) an increase in the money wage rate.

   Answer: A

17) The quantity of real GDP demanded equals $7.2 trillion when the GDP deflator is 90. If the GDP deflator rises to 95, the quantity of real GDP demanded equals
   A) less than $7.2 trillion.
   B) $7.2 trillion.
   C) more than $7.2 trillion but less than $7.8 trillion.
   D) more than $7.2 trillion but without more information it is not possible to determine how much more.

   Answer: A

18) All of the following explain the downward slope of the aggregate demand curve EXCEPT
   A) changes in real wealth.
   B) the effect of changing interest rates on the quantity demanded of goods today versus goods in the future.
   C) the availability of foreign substitute goods.
   D) the presence of unused production capacity and unemployment.

   Answer: D
19) A rise in the price level will have an effect on aggregate demand because
   A) people like to spend more when prices are higher.
   B) the real value of people’s wealth varies directly with the price level and so does their spending.
   C) the real value of people’s wealth decreases and so they decrease their consumption.
   D) the more money people have, the more it is worth and hence the more goods and services they demand.
   Answer: C

20) The intertemporal substitution effect refers to substitution of
   A) goods for services.
   B) goods and services for less expensive goods and services.
   C) goods and services today for goods and services in the future.
   D) goods and services today for goods and services in past.
   Answer: C

21) Which of the following would NOT shift the U.S. aggregate demand curve?
   A) a change in income in Canada.
   B) the quantity of capital in the United States.
   C) an expectation that inflation will be lower in the future.
   D) U.S. monetary and fiscal policy.
   Answer: B

22) Which of the following shifts aggregate demand curve rightward?
   A) A decrease in government purchases.
   B) The expectation of a future loss of income.
   C) A decrease in the money supply and an increase in interest rates.
   D) A cut in personal income taxes.
   Answer: D

23) The Federal Reserve lowers interest rates. As a result, in the short run
   A) real GDP will increase and the price level will rise.
   B) real GDP will increase and the price level could rise or fall.
   C) real GDP will decrease and the price level will increase.
   D) real GDP will increase and the price level will fall.
   Answer: A

24) When the foreign exchange increases so that the value of the dollar rises, then the
   A) \( AD \) curve shifts rightward.
   B) \( AD \) curve shifts leftward.
   C) \( LAS \) curve shifts rightward.
   D) \( LAS \) curve shifts leftward.
   Answer: B

25) The government increases its purchases of goods and services. As a result, in the short run
   A) real GDP will increase and the price level will rise.
   B) real GDP and the price level will decrease.
   C) real GDP will decrease and the price level will increase.
   D) real GDP will increase and the price level will fall.
   Answer: A

Essay Questions:

1) Visit the Bureau of Labor Statistics and find unemployment rate and CPI. (If not available, use Houston instead).
A) What have been the trends in the past two years?
B) Compare our region with that of nation as whole, how would you set about explaining its deviation from the national average?

There is no unique answer to this question.

2) Page 171, #4, #6, and #8.

#4  a. the aggregate demand curve is represented by: \( P = 150 - \frac{GDP}{10} \)
the aggregate supply curve is represented by: \( P = 60 + \frac{GDP}{5} \)
b. the short run equilibrium is: price=120, GDP = 300
c. long run AS curve is vertical at the point of 250 of GDP

#6. The AD curve was: \( P = 150 - \frac{GDP}{10} \)  \( \Rightarrow \) \( GDP = 1500 - 10P \)
Aggregate demand decreases by $100 billion. So the new AD curve is: \( GDP = 1350 - 10P \)

The AS curve was: \( P = 60 + \frac{GDP}{5} \)  \( \Rightarrow \) \( GDP = 300 + 5P \)

The new equilibrium price and GDP are: price = 70, GDP= 650.

#8. The AD supply curve is \( GDP = 300 + 5P \).
Aggregate supply curve increases by $150 billion.
The new AD curve is: \( GDP = 450 + 5P \).
The new equilibrium price and GDP are: price = 70, GDP = 800.