Multiple Choice (32 questions, 2.5 points each, 80 points total). Clearly indicate (by circling) the ONE BEST response to each of the following multiple choice questions.

1. According to the latest data released on real GDP:
   a. Economic growth (production) was higher in the second quarter than in the first quarter of 2002.
   b. Economic growth (production) was lower in the second quarter than in the first quarter of 2002.
   c. There was no difference between economic growth (production) in the second quarter than in the first quarter of 2002.
   d. Real GDP cannot be used to determine the rate of economic growth or production.

2. If you were asked to study the quantity of output an economy produced over the past five years, you would use real GDP rather than nominal GDP because:
   a. Exports are excluded from real GDP, making it less complicated than nominal GDP.
   b. Real GDP accounts for imports, making it more precise than nominal GDP.
   c. Nominal GDP fails to account for transfer payments, whereas real GDP includes these payments.
   d. Nominal GDP reflects changes in both output and prices, whereas real GDP, roughly speaking, merely reflects changes in output.

3. Which of the following is an example of an intermediate good?
   a. Ford buys windshields to put in the new Taurus it is manufacturing.
   b. Beth buys a calculator to help her keep track of the balance in her checkbook.
   c. The city of Warrensburg pays $30,000 to hire an additional police officer.

4. In the late 1990's, the economy was experiencing a prolonged expansion and the unemployment rate fell to near 4 percent. Companies had a hard time finding workers. What type of unemployment was declining during this period?
   a. Cyclical unemployment.
   b. Full unemployment.
   c. Structural unemployment.
   d. Frictional unemployment.

5. Which of the following statements is correct?
   a. The real interest rate can not be a negative number.
   b. The GDP deflator is NOT based on a fixed basket of goods and services.
   c. The GDP deflator and the CPI typically have the same value.
   d. Changes in quality are fully reflected in the CPI.
6. Suppose the rate of inflation rises from 3 percent to 6 percent. At the same time, nominal rate of interest increases from 5 percent to 10 percent.
   a. The real rate of interest will increase.
   b. Households will benefit at the expense of banks.
   c. The real rate of interest will not change.
   d. The real rate of interest will fall.

7. Which of the following is an example of a normative economic statement?
   a. If the economy is experiencing full employment, a large tax cut will create inflation.
   b. An increase in the government’s budget deficit will cause an increase in interest rates.
   c. A decrease in the minimum wage will decrease unemployment among teens.
   d. The federal government should increase spending on education.

8. Suppose you paid $300 to take an economics course, which meets 30 times for one hour a class, during the course of the semester. Instead of attending class, you could have either flipped hamburgers for $8 an hour or waited tables for $5 an hour. Given this information, the opportunity cost of attending each class session is:
   a. $30.
   b. $8.
   c. $5.
   d. $13.

9. For purposes of calculating GDP, which of the following is NOT included in the government expenditures component?
   b. The payroll of the federal government.
   c. Welfare payments to the poor.
   d. The government’s purchase of a computer.

10. Which of the following people would be considered unemployed?
    a. A 55-year-old steel worker who was laid off 18 months ago and has given up trying to find a job.
    b. A woman who has quit college to move to New York where she is sending out applications for a modeling job.
    c. A young man who recently received his Ph.D. but who is driving a taxi because of an inability to find a teaching job.
    d. A student who plans to look for work after graduation.

11. If the CPI in year 2 equals 110 and the CPI in year 3 equals 121, it can be concluded that consumer prices:
    a. Rose from year 2 to year 3 by 11.
    b. Rose from year 2 to year 3 by 11%
    c. Rose from year 2 to year 3 by 10%
    d. Are the same in year 2 as in the base year.
<table>
<thead>
<tr>
<th></th>
<th>In billions of dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>3600</td>
</tr>
<tr>
<td>Investment</td>
<td>800</td>
</tr>
<tr>
<td>Transfer payments</td>
<td>750</td>
</tr>
<tr>
<td>Government expenditures</td>
<td>1000</td>
</tr>
<tr>
<td>Exports</td>
<td>650</td>
</tr>
<tr>
<td>Imports</td>
<td>450</td>
</tr>
<tr>
<td>Net foreign factor income</td>
<td>-30</td>
</tr>
</tbody>
</table>

12. A Keynesian economist would be most likely to agree with which of the following statements?
   a. Government policies do not affect economic activity.
   b. Government can implement policy proposals that can positively impact the economy.
   c. Most government policies would probably make things worse.
   d. The economy ought to be left to market forces.

13. Calculate GDP using the table at the top of the page.
   a. 5570
   b. 5600
   c. 6050
   d. 6320

14. When we are talking about the CPI, which of the following is an example of substitution bias?
   a. When new goods are introduced, consumers have greater variety, which makes the dollar more valuable.
   b. As prices change, producers substitute resources toward the production of goods whose prices have increased.
   c. As prices change, consumers still buy the same basket of goods and services.
   d. Consumers substitute toward less expensive goods when prices change.

15. According to the latest unemployment statistics:
   a. It’s bad news – the unemployment rate increased in August.
   b. It’s bad news – the unemployment rate decreased in August, but only because some of the unemployed left the labor force.
   c. It’s good news – the unemployment rate decreased in August, and the number of people employed increased.
   d. There’s no change – the unemployment rate was the same in July and August.

16. If a country’s real GDP and population are, respectively, $750 billion ($750,000 million) and 250 million, then its per capita real output is:
   a. $300.
   b. $1,125.
   c. $3,000.
   d. $11,250.
17. Which of the following is considered as part of the investment component of GDP?
   a. Purchase of 1000 shares of IBM stock.
   b. Purchase of a used home.
   c. Purchase of a $1,000 bond issued by Microsoft.
   d. Purchase of a calculator by a banker.

18. Mexico can produce vine-ripened tomatoes at a lower opportunity cost than firms in the United States. Through negotiations, the United States lifted quotas limiting the import of tomatoes from Mexico. Some firms in Florida, in the face of this new competition, had to close their farms and let go their workers. Many of the workers could not find new jobs right away. What type of unemployment describes the workers' situation?
   a. Cyclical unemployment.
   b. Full unemployment.
   c. Structural unemployment.
   d. Frictional unemployment.

19. If real GDP in a given year was $1,000 billion and nominal GDP was $2,500 billion the GDP deflator would be:
   a. 40.
   b. 100.
   c. 0.4.
   d. 250.

20. In 1955 and 1956, the Fed raised interest rates in order to reduce inflationary pressures. This was an example of:
   a. Monetary Policy.
   b. Fiscal Policy.
   c. Supply Side Policies.
   d. Incomes Policies.

21. Suppose that in the country of Newtonland, nominal GDP increased over the 2000-2001 time period. There was no change in real GDP over this time period. We can conclude that:
   a. There was no change in the price level.
   b. The price level fell.
   c. The price level increased.
   d. Output increased.

22. Comparisons of GDP levels across countries are most accurate when:
   a. The value of non-market activities is the same across countries.
   b. Prices are the same across countries.
   c. Prices and the value of non-market activities are the same across countries.
   d. Prices for non-market activities are the same across countries.

23. Inflation refers to:
   a. A continuing decrease in the overall level of prices in the economy.
   b. An increase in the overall level of prices in the economy.
   c. An increase in the amount of goods that can be purchased with a given amount of money.
   d. An increase in all prices in the economy.
24. The price of helicopters purchased by the U.S. military increases. This increase would be reflected:
   a. In both the CPI and the GDP deflator.
   b. Only in the GDP deflator.
   c. Only in the CPI.
   d. In neither the CPI nor the GDP deflator.

25. Many colleges offer night classes to boost the enrollment of older, “non-traditional” students. This phenomenon can be explained in terms of people responding to incentives because:
   a. The opportunity cost of college for people who have day jobs is lower if they take classes at night.
   b. The opportunity cost of college for people who have day jobs is higher if they take classes at night.
   c. The opportunity cost of college for people who have day jobs is lower if they take classes during the day.
   d. Colleges are institutions that wish to maintain the status quo. Since they rely heavily on funding from government, they need to do little to satisfy customer needs.

26. Which of the following would not be included in the consumption component of GDP?
   a. Your college tuition.
   b. Medical expenses.
   c. Police protection.
   d. A movie ticket.

27. To compute the unemployment rate, you need the following information:
   a. The number of unemployed persons and the size of the population.
   b. The number of unemployed persons and the number of discouraged workers.
   c. The number of employed persons and the number of unemployed persons.
   d. The number of persons in the labor force and the size of the population.

28. Which of the following statements is correct?
   a. The producer price index is often thought of as a useful predictor of changes in the consumer price index.
   b. The producer price index measures the cost of a basket of goods and services bought by a typical consumer.
   c. The producer price index is NOT based on a basket of goods and services.
   d. The GDP deflator can be inaccurate because of substitution bias.

29. A recession occurs when:
   a. An economic downturn persists for two or more consecutive quarters.
   b. An economic downturn persists for three or more consecutive quarters.
   c. The business cycle reaches a trough.
   d. The business cycle reaches a peak and begins to turn down.
30. If U.S. net exports are positive, then:
   a. U.S. GDP is less than the sum of consumption, investment, and government purchases.
   b. U.S. GDP exceeds the sum of consumption, investment, and government purchases.
   c. U.S. imports must exceed U.S. exports.
   d. U.S. GDP equals the sum of consumption, investment, and government purchases.

31. Which of the following is not a limitation of national income accounting?
   b. The use of real GDP to measure changes in economic activity over time.
   c. The use of real GDP to measure changes in social welfare over time.
   d. Confusion about what is included in each component of GDP.

32. Which of the following is not a part of US GDP?
   a. The fee imposed on a person who buys a share of BMW stock from a U.S. trading firm.
   b. The value of a BMW imported from Germany.
   c. The value of a BMW produced in the U.S.
   d. The commissions earned by a BMW dealership in the US.
1. (10 points total) Suppose you are interested in constructing a price index that follows the cost of going to an Atlanta Braves baseball game. You decide to include in this index: 2 tickets, 4 beers, 3 hotdogs, 1 pretzel, and 1 game program. You have surveyed the cost of this “market basket” last year and this year, and found the following total expenditures:
   - August 2001: $75
   - August 2002: $85

(a) (5 points total) Using August 2001 as your base year, calculate the Braves Price Index for 2001 and 2002. In order to receive full credit you must show any formulas that you use, and ALL of your work.

(b) (5 points total) Calculate the inflation rate for a Braves game between August 2001 and August 2002. In order to receive full credit you must show any formulas that you use, and ALL of your work.

Question 2 is on the next page.
2. (10 points total) Below are some labor force statistics from the Aug. 2002 for individuals who have less than a high school diploma:

- Number Employed: 10,762
- Number Unemployed: 991
- Number Not in Labor Force: 15,147

(a) (5 points) Using these numbers, calculate the unemployment rate in August. In order to receive full credit you must show any formulas you use, and ALL of your work.

(b) (5 points) Using these numbers, calculate the labor force participation rate. In order to receive full credit, you must show any formulas you use, and ALL of your work.