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ECON 201—Montgomery College
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EXAM 2

Practice Exam B

- There are 110 possible points on this exam. The test is out of 100.
- You have one class session to complete this exam, but you should be able to complete it in less than that.
- Please turn off all cell phones and other electronic equipment.
- You are allowed a calculator for the exam. This calculator cannot be capable of storing equations. This calculator cannot double as a cell phone.
- Be sure to read all instructions and questions carefully.
- Remember to show all your work.
- Try all questions! You get zero points for questions that are not attempted.
- *Please print clearly and neatly.*

Part I: Matching. Write the letter from the column on the right which best matches each word or phrase in the column on the left. You will not use all the options on the right and you cannot use the same option more than once.

2 points each.

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|--|--|
| 1. H Cyclical unemployment | A. Amount determined by past laws and current conditions in the country. |
| 2. G Discouraged workers | B. Excludes washing your own dishes |
| 3. I Discretionary spending | C. GDP doesn't include this, but it should |
| 4. B Gross Domestic Product | D. GDP doesn't include this, and it shouldn't |
| 5. E New consumer durables | E. GDP includes this, and it should |
| 6. A Mandatory spending | F. GDP includes this, but it shouldn't |
| 7. D Transfer payments ¹ | G. Not in the labor force |
| | H. Not a part of the natural rate of unemployment but in the labor force |
| | I. Government agencies getting money for specific purposes. |

- Cyclical unemployment is unemployment due to recessions. Such individuals are in the labor force (because they are looking for work) but should have a job if the economy was functioning well.*
- Such workers don't have a job and aren't looking for work. Like stay-at-home parents, the retired, and some students, they are therefore not in the labor force.*
- Discretionary spending must be explicitly approved by Congress and the President each fiscal year—it is not part of an ongoing spending requirement. Discretionary spending empowers government agencies to spend money; it's a law that allows an agency to spend for specific purposes. An "appropriation" is a law that grants an agency with "budget authority" (the right to spend money from the Treasury); discretionary spending is made up of appropriations.*
- Washing your own dishes is nonmarket production; it create value but since it isn't a market transaction it's not included in the labor force.*
- Consumer durables which are brand new (not used) are a form of consumption. Since they were recently produced, they should be included in GDP. Such goods are included under C, or consumption.*
- Mandatory spending's the result of previously made laws ("statutory considerations") and are largely made up of entitlements. Thus how*

¹ As in, when the government gives someone money. Examples include unemployment insurance, welfare, and Social Security.

much spending occurs is based on how many people fulfill the requirements.

7. *When the government sends people money it hasn't purchased anything. Transfer payments are not included in GDP as they shouldn't; nothing was produced. This money will be counted, however, when the recipient uses it to buy things.*

Part II: Multiple Choice. *Choose the best answer to the following.*

4 points each.

8. Which of the following goods is/are **never directly** counted as a part of GDP?
- Computer games
 - Used bicycles**
 - Airplane engines
 - A & C
 - B & C

*Used bicycles aren't produced (only new ones are) so they aren't included. Airplane engines sometimes aren't directly counted (because they are intermediary) **BUT they are** explicitly counted when the engine is imported/exported.*

9. The theory of convergence relies on what idea?
- Diminishing marginal productivity of capital**
 - Diminishing marginal productivity of education
 - Diminishing marginal utility of education
 - B & C
 - None of the above

Poor countries tend to have very little capital while wealthy ones have a lot of capital. Because of diminishing marginal productivity of capital, a unit of capital in a wealthy country won't add much to the country's wealth. But that same unit of capital in a poor country would add a great deal to that country's wealth. Thus the wealth of each country will converge over time.

10. In *The Economic Organization of a P.O.W. Camp*, what kind of money were the currencies discussed in the reading?
- Cigarettes: commodity currency; German marks: fiat currency.
 - Cigarettes: commodity currency; bully marks: fiat currency.
 - Cigarettes: commodity currency; bully marks: representative currency.**
 - Cigarettes: representative currency; bully marks: fiat currency.
 - Cigarettes: representative currency; bully marks: representative currency.

The value of the cigarette was the cigarette itself; it was a commodity currency. But the bully mark represented food; it was a representative currency. The reading did not discuss German marks.

11. Can a progressive tax system cause a pay raise to result in less after-tax income?
- Yes, because if someone is just under the cutoff for one bracket and then a raise puts them in a higher tax bracket, they pay a larger share of their income in taxes and the income after taxes actually falls.
 - Yes, discourages them from working, thus they get a lower salary.
 - No, because these are marginal tax rates.**
 - No, because tax rates are the same regardless of how much people make.
 - Uncertain, because it depends on what the various tax rates actually are.

A progressive tax system uses marginal tax rates. If making \$5,000 more results in being in a higher tax bracket, only some part of that \$5,000 will be subject to that higher rate, not your whole salary.

While high tax rates can discourage work, the question is about getting a pay raise. If you get more money, will your after-tax income actually fall? Unless the progressive tax system is set up idiotically, this won't happen.

12. We discussed many gaps, or problems, with how GDP is calculated. Which of the following is *not* such a gap?
- It doesn't include any steel sold to a local car company.**
 - It doesn't include cooking your own dinner.
 - It doesn't include cooking meth and the creation of other illegal substances.
 - B & C
 - None of the above

While it's true that it doesn't include steel sold to a car company, this is not a problem as such steel would be an intermediary good.

13. Which of the following would illustrate the fundamental problem of a CPI which only examines the price of various clothes?
- If the price of televisions increased, there would be no inflation.
 - An increase in the price of fabric would register as inflation.**
 - Both A & B are equally problematic.
 - There is nothing wrong with such a CPI.
 - There is something wrong, but none of them are listed here.

The CPI is used to calculate inflation. It does this by examining the prices of a variety of goods. It's important that there's a variety so price increases unique to an industry aren't mistaken for an increase in the price level.

So why isn't A also correct? While it may be problematic, it's not a fundamental issue. Just because an increase in the price of television doesn't result in inflation doesn't mean there's a problem. The whole point of a variety of goods is that no one good has undue sway.

14. Which of the following is a zero-sum game?
- a. Soccer
 - b. War
 - c. Economic growth
 - d. A & B**
 - e. All of the above

As discussed in class, economic growth is a positive-sum game: all countries can grow. But in soccer and war, there must be a loser for there to be a winner; not everyone can win.

You could argue this is wrong, that soccer is a positive-sum game, too. While there must be a loser to have a winner, both sides enjoyed playing (that's why each decided to play in the first place) so the group as a whole comes out ahead.

You could also argue that war is actually a negative-sum game: the gains to the victor are less than the losses to the loser because so many lives were lost and resources destroyed (not to mention the opportunity cost!).

15. Which of the following is **not** a function of money?
- a. Always used in every exchange
 - b. Prices of the same good should be the same everywhere**
 - c. Doesn't lose value over time
 - d. B & C
 - e. None of the above

Both A and C are functions (medium of exchange and store of value, respectively) but B is not.

16. According to the quantity theory of money, which of the following is true?
- a. Increasing the money supply (M) *always* leads to inflation.
 - b. The *only* way to get inflation is to increase the money supply (M).
 - c. Increasing real GDP *increases* the price level, all other things being equal.
 - d. Increasing real GDP *decreases* the price level, all other things being equal.**
 - e. None of the above

Remember the equation: $Mv = pY$. A isn't true because you can increase Y or decrease v to balance the equation. B isn't true because you can increase v or decrease Y to get inflation. C is the opposite of what actually happens when you increase Y : holding M and v the same, if Y increases, p must fall.

17. When the government spends more money than it brings in:
- It's called a deficit.
 - It's called a debt.
 - It issues bonds.
 - A & C**
 - All of the above

Any shortfall between revenue and outlays is called a deficit (and is added to total debt). To make up this shortfall, the government borrows money in the form of government bonds.

18. As we discussed, the labor force participation rate for women is substantially higher than it was 60 years ago. Which of the following is **not** a possible reason for this change?
- The decline of sexism in the workplace
 - The economy's greater emphasis on professional services
 - The invention of birth control
 - A & C
 - None of the above**

All of these things contributed to the increase in the female labor force participation rate.

19. Which of the following statements is/are true?
- It is possible for the number of net new jobs created to be unusually high and, at the same time, for the unemployment rate to rise.
 - Unexpected inflation hurts lenders because makes it more likely people will not be able to pay back their loans.
 - All the ways people in a country spend money equals all the ways people in that country make money.
 - A & C**
 - All of the above are true

A is true if there are many discouraged workers. A large number of newly created jobs encourage people to start looking. These new entrants to the labor force increase unemployment. C is also true: the total income in a country equals the total spending in a country. That's why there are two different ways to calculate GDP: the income and the spending approaches.

But B is false. While unexpected inflation hurts lenders, it's because the inflation makes the resulting money less valuable. In fact, people are more likely, not less likely, to pay back their loans (because wages would increase).

Part III: Short Answer. *Answer the following.*

16 points each.

20. We discussed several reasons why the labor force participation rate changes over time. Briefly describe two of these reasons.

1) *Changes in demographics change the LFPR. If the elderly take up a larger share of the population (due to aging baby boomers and/or improved lifespan), LFPR falls as the percent of adults in retirement increases. If many immigrants enter the country, the LFPR may rise since immigrants tend to not only be of working age but they also immigrate to work. They would be either be looking for a job or already have one.*

2) *Taxes and benefits change the LFPR. Reducing Social Security benefits for working seniors encourage them to leave the labor force. Generous benefits for needy people may discourage them from looking for a job.*

You could also discuss the new kinds of jobs available, improved technology (notably the Pill), and decreased sexism in the workplace, each of which encourage women to enter the labor force.

21. Using the hypothetical data below, calculate the unemployment rate, the natural rate of unemployment, and the labor force participation rate. Remember to show all your work. Round your answers to the nearest two decimal places, if necessary.

	<i>Population (thousands)</i>
<i>Employed Full Time</i>	350
<i>Employed Part Time</i>	200
<i>Frictional Unemployed</i>	22
<i>Discouraged Workers</i>	15
<i>Structural Unemployed</i>	8
<i>Cyclical Unemployed</i>	20

<i>Adult Population</i> ²	750
<i>Total Population</i>	900

First, we need all the people who are unemployed. Remember, discouraged workers are not unemployed! So we add up the structural, frictional, and cyclical unemployment:

$$22+8+20 = 50$$

Now we add that number to the employed to get the labor force. The total employed are the full time and part time employed people are: 350+200 = 550.

$$50+550=600$$

The unemployment rate is thus: $50 / 600 = 8.3\%$

The natural rate is calculated the same way, but we don't include cyclical unemployment in the numerator. We still include it in the denominator because the cyclically unemployed are still in the labor force.

The natural rate is thus: $30 / 600 = 5.0\%$

The labor force participation rate is the labor force divided by the adult population (or, all the people who could be working): $600 / 750 = 80.0\%$

22. We discussed three functions of money. List **all three** of those functions and indicate what's needed of the currency to make each of the functions you indicated work.

a. *Medium of exchange.*

The currency must be portable and granular. In other words, people have to be able to carry it around and be able to purchase low-value items.

b. *Unit of account.*

² Civilian and noninstitutionalized

The currency must be uniform. In other words, each unit of the currency must be the same as every other unit so a total amount results in a meaningful price.

c. *Store of value.*

The currency must not rot or decay. In other words, it has to hold its value over time so people can reasonably expect to be able to buy the same number of goods and services months or years into the future.

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