

EXAM #1

$$\frac{162 + 20}{200} = 182$$

Econ 1300

Fall '05

Name: \_\_\_\_\_

140

**PART 1: MULTIPLE CHOICE (4 points each, or 40 total points)**

**Directions: Choose the BEST answer to each of the following.**

+108

1. The price index in 2001 is 200. During the next year there is 5% inflation. Which of the following is NOT true?

- A. The price index in 2002 is 205.
- B. From the base year until 2001, average prices have doubled.
- C. Both A and B
- D. All of the above

2. Suppose that the Canadian nominal GDP grows from \$1 billion to \$1.5 billion by the next year. At the same, the GDP deflator went from 140 to 180. Which of the following is true?

- A. Real GDP has risen.
- B. Real GDP has fallen.
- C. Real GDP has stayed constant.
- D. Inflation was nearly non-existent.
- E. Both C and D

3. If banks wish to receive a real interest rate of 2% on loans and expected inflation is 3%, they would need to charge \_\_\_\_\_ on loans.

- A. 1%
- B. 2%
- C. 3%
- D. 4%
- E. None of the above

4. Which of the following is a normative statement?

- A. The government should continue to raise spending on education.
- B. Spending on education has risen in each of the last 10 years.
- C. More people graduated from high school this year than last year because of the higher spending on education.
- D. Both B and C
- E. All of the above

5. According to the circular flow model,

- A. Businesses are suppliers in product markets and demanders in resource markets.
- B. Businesses are demanders in product markets and suppliers in resource markets.
- C. Households are suppliers in product markets and demanders in resource markets.
- D. Households are suppliers in product markets and suppliers in resource markets.

6. Which of the following is NOT a characteristic of the market system?
- A. Government ownership of property is minimal.
  - B. Private businesses answer the question of what to produce in the economy.
  - C. There is competition in product and resource markets.
  - D. Prices negatively affect the efficiency of the economy.
7. Suppose \$100 goes from Smith to Jones.
- A. We can say with certainty that the GDP has increased by \$100.
  - B. We can say with certainty that the GDP has increased, but we cannot determine the amount.
  - C. We can say with certainty that the nominal GDP has increased, but we can't say whether real GDP has increased or decreased.
  - D. We need more information to determine whether GDP has changed.
8. National income accountants can avoid multiple counting by:
- A. including transfers in their calculations.
  - B. counting both intermediate and final goods.
  - C. only counting final goods.
  - D. only counting intermediate goods.

Use the following information in answering questions #9 & 10.

Consider a simple economy where consumers only purchase 2 goods: toys & food. Each year consumers buy 10 units of food and 10 units of toys. The following table shows the prices of each of these goods over two years:

	1990 Price	2000 Price
Food	\$5 $\times$ 10 = \$50	\$15 $\times$ 10 = \$150
Toys	\$20 $\times$ 10 = \$200	\$15 $\times$ 10 = \$150

Assume 1990 is the base year.

9. Which of the following is the closest to the value of the CPI in 1990?
- a. 86
  - b. 100
  - c. 108
  - d. 115
  - e. 168
10. Which of the following is the closest to the value of the CPI in 2000?
- a. 100
  - b. 112
  - c. 120
  - d. 140
  - e. 144

11. Kaili grows tomatoes for home consumption. This activity is:

- A. excluded from GDP in order to avoid double counting.
- B. excluded from GDP because an intermediate good is involved.
- C. productive but is excluded from GDP because no market transaction occurs.
- D. included in GDP because it reflects production.

12. In calculating GDP, governmental transfer payments, such as social security or unemployment compensation, are:

- A. not counted.
- B. counted as investment spending.
- C. counted as government spending.
- D. counted as consumption spending.

13. The United States' economy is considered to be at "full employment" when:

- A. 90 percent of the total population is employed.
- B. 90 percent of the labor force is employed.
- C. about 5 percent of the labor force is unemployed.
- D. 100 percent of the labor force is employed.

14. The labor force is found by:

- A. Subtracting unemployed from the population.
- B. Subtracting discouraged workers from the population.
- C. Adding together unemployed and employed.
- D. Adding together employed and self-employed.
- E. None of the above

15. Bernie was employed in the cassette tape manufacturing industry. With the spread of compact disc usage, tape demand fell and Bernie's factory closed down. We would best describe his unemployment as:

- A. Cyclical Unemployment
- B. Frictional Unemployment
- C. Structural Unemployment
- D. Marginal Unemployment
- E. Rate-sensitive Unemployment

16. Jeff has been interviewing for jobs ever since he voluntarily quit his last position. Which of the following is NOT true?

- A. Jeff is a discouraged worker.
- B. Jeff is counted in the unemployment calculations.
- C. Jeff's type of unemployment is considered to be a part of the natural rate of unemployment.
- D. Both A and C
- E. All of the above

For questions #17-20, consider the following production data for an imaginary economy that only produces TVs and houses.

	Point A	Point B	Point C	Point D	Point E	Point F
TVs	0	4	8	12	16	20
Houses	10	8	6	4	2	0

17. What is the opportunity cost of moving from combination D to C?

- A. 4 TVs
- B. 12 TVs
- C. 2 Houses
- D. 4 Houses
- E. None of the above

18. Which of the following describes the combination of 10 TVs and 10 houses?

- A. Currently attainable, but not productively inefficient
- B. Currently attainable and productively efficient
- C. Will never be able to be produced.
- D. There is substantial unemployment of resources when at this point.
- E. None of the above

19. Which of the following describes the point characterized by 4 TVs and 8 houses?

- A. Currently attainable, but not productively inefficient
- B. Currently attainable and productively efficient
- C. Will never be able to be produced.
- D. There is substantial unemployment of resources when at this point.
- E. None of the above

20. It is found that society is best off when producing 8 TVs and 6 houses. Which of the following describes this point on the production possibilities frontier?

- A. Currently attainable
- B. Productive efficiency
- C. Allocative efficiency
- D. There is no unemployment of resources when at this point.
- E. All of the above

21. Adrian is offered a job in Boston at a salary of \$70,000 per year. He is also offered a job in Des Moines at a salary of \$50,000 per year. The CPI for Boston is 120 and for Des Moines is 80. If all Adrian cares about is the purchasing power of his income, which job should he take?

- A. The Boston job
- B. The Des Moines job
- C. Either job
- D. Not enough information given
- E. None of the above

For questions #22-25, choose one of the following to describe the direct effect the event will have on the equilibrium GDP in the United States.

- A. GDP increases because consumption increases.
- B. GDP increases because investment increases.
- C. GDP increases because government spending increases.
- D. GDP increases because net exports increases.
- E. No effect on GDP

22. The U.S. Air Force purchases 5 new stealth bombers from a Seattle-based manufacturer.

- A                      B                      C                      D                      E

23. Due to the consumer craze over boomerangs, there is a large influx of boomerangs imported from Australia.

- A                      B                      C                      D                      E

24. You win a \$50 million in lottery jackpot!

- A                      B                      C                      D                      E

25. Tracey takes her car to an auto dealership for an oil change.

- A                      B                      C                      D                      E

26. If there is an decrease in interest rates, then:

- a. Consumption will rise.
- b. Investment will fall.
- c. Exports will rise.
- d. Exports will fall.
- e. Imports will fall.

27. Other things equal, an increase in an economy's exports will:

- A. lower the marginal propensity to import.
- B. have no effect on domestic GDP because imports will change by an offsetting amount.
- C. decrease its domestic aggregate expenditures and therefore decrease its equilibrium GDP.
- D. increase its domestic aggregate expenditures and therefore increase its equilibrium GDP.

28. If Janet is laid off because her company's product is temporarily not in demand, she is considered to be a part of the:

- A. Structural unemployment
- B. Frictional unemployment
- C. Cyclical unemployment
- D. Inflationary unemployment
- E. None of the above

29. During the initial stages of an economic recovery following a recession,
- A. the unemployment rate may be slow to fall.
  - B. discouraged workers begin to leave the labor force.
  - C. the size of the labor force begins to shrink.
  - D. Both A and B
  - E. All of the above
30. "Productive efficiency" refers to:
- A. producing the most possible, given current resources & technology.
  - B. the production of the product-mix most wanted by society.
  - C. the full employment of all available resources.
  - D. production at some point inside of the production possibilities curve.
  - E. both a and b
31. Which of the following is NOT one of the 4 main components of GDP?
- a. Consumption
  - b. Investment
  - c. Taxes
  - d. Government Expenditures
  - e. All of the above ARE components of GDP
32. U.S. gross domestic product measures the market value of all:
- a. intermediate and final goods and services produced by resources located in the United States during the year.
  - b. final goods and services consumed within the United States during the year.
  - c. final goods and services produced by resources located in the United States during the year.
  - d. final goods and services produced by resources located inside and outside of the United States during the year, as long as those resources are owned by U.S. citizens.
33. Other things equal, an increase in which of the following items does NOT increase GDP?
- a. imports
  - b. exports
  - c. investment
  - d. government purchases of goods & services
  - e. Increases in all of these WILL raise GDP
34. Intermediate goods:
- a. are goods that have no price.
  - b. are goods that are used in production of other goods.
  - c. cause a reduction in the standard of living.
  - d. are supplied only by the government.
  - e. are goods that are neither very costly, nor very inexpensive

35. Suppose that the population of Jumanji is 12 million. Last quarter, it was determined that there were 8 million people employed. Also, the size of the labor force was calculated to be 10 million (the other 2 million people were either in jail or not interested in finding employment). Calculate the unemployment rate for this quarter. It is:

- a. 10%
- b. 12.5%
- c. 15%
- d. 20%
- e. None of the above

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**Part 2: The Aggregate Expenditures Model (60 points)**

+54

Consider the following information on the economy of Atlantis.

$$C = 500 - 250r + .9(Y-T)$$

$$I = 200 - 200r$$

$$G = 200$$

$$X = 100$$

$$M = 100$$

$$T = 100 + .2Y$$

$$r = .2$$

a. Calculate the equilibrium GDP ( $Y_e$ ). SHOW YOUR WORK. (25 points)

$$C = 500 - 250(.2) + (.9Y - .9T)$$

$$C = 450 + (.9Y - .9(100 + .2Y))$$

$$C = 450 + (.9Y - 90 - .18Y)$$

$$C = 360 + .72Y$$

$$I = 200 - 200(.2)$$

$$I = 160$$

$$360 + .72Y + 160 + 200 + (0)$$

$$AE = 720 + .72Y$$

$$Y = 720 + .72Y$$

$$-.72Y \quad -.72Y$$

$$\frac{.28Y = 720}{.28}$$

$$Y_e = 2571.43$$

$$Y = 2571.43$$

25

b. Find the amount of consumption in the economy. SHOW YOUR WORK. (5 Points)

$$C = 360 + .72(2571.43)$$

$$C = 360 + 1851.12$$

$$C = 2211.12$$

$$2211.12$$

5

c. Is the government running a budget surplus or deficit? SHOW YOUR WORK. (5 points)

3

$$T = 100 + 0.2(2571.43)$$

$$T = 100 + 514.286$$

$$T = 614.29$$

$$G = 200$$

~~Deficit~~  
 Surplus

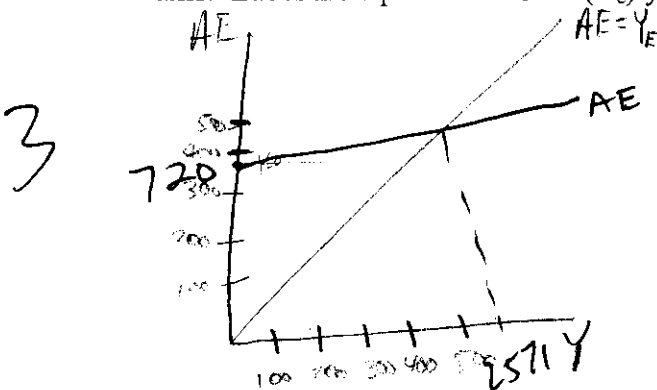
d. Suppose full employment output ( $Y_f$ ) was equal to 3,200. Knowing this, how would you describe the current state of the economy? (5 points)

4 I would say that there is unemployment of resources at this particular point.

e. If the government doubled spending to 400, what do you predict would happen to the level of production in the economy? (You don't need to solve the model again here—just explain.) (10 points)

10 AE would increase by a factor of <sup>multiple</sup> ~~of 400~~, this is due to the multiplier effect

f. Graph the AE line on an appropriate diagram, showing the intercept on the vertical axis. Label the equilibrium GDP ( $Y_e$ ) you found in part a. (5 points)



g. What would happen if the economy was producing an output below  $Y_e$ ? (5 points)

3 If  $Y_e < Y$ , I would say that ~~demand~~ <sup>production</sup> was low, possibly due to recession  $\rightarrow$  production  $\uparrow$