Economics 101 – Lec 3　　　　　　　**Student Name: _____**
Elizabeth Kelly　　　　　　　　　　**ID Number: _____**
Fall 2000　　　　　　　　　　　　　**Section Number: _____**
Midterm #1 / Version #1　　　　　　**TA Name: _____**
October 2, 2000

VERSION 1

DO NOT BEGIN WORKING
UNTIL THE INSTRUCTOR TELLS YOU TO DO SO.
READ THESE INSTRUCTIONS FIRST.

You have the class period of 50 minutes to complete the exam. The exam consists of three parts: 5 true/false questions, 12 multiple choice questions, and 1 problem. Each true/false question is worth 2 points for a total of 10 points, each multiple choice question is worth 3 points for a total of 36 points, and the problem is worth 14 points. Please answer all true/false questions and multiple choice questions on the coding sheet with a #2 **pencil**. Choose the best answer. Answer the problem on the exam booklet. Please make sure you write legibly and are clear about the solution to the problem. **No calculators are allowed.** Please fill out the blanks at the top of the exam booklet. There are 8 pages in this exam booklet.

How to fill in the coding sheet:
1. Print your last name, first name, and middle initial in the spaces marked "Last Name," "First Name," and "MI." Fill in the corresponding bubbles below.
2. Print your student ID number in the space marked "Identification Number." Fill in the corresponding bubbles below.
3. Write your discussion section number under "Special Codes" spaces **ABC**, and fill in the bubbles. You can find the discussion numbers below on this page.
4. Write your version number under "Special Codes" space **D**, and fill in the bubble.

- If you have any questions during the exam, stay seated and raise your hand.
- When you are finished, please get up quietly and bring your code sheet and this exam booklet to the place indicated by the instructors.

DISCUSSION SECTIONS:

Disc 381	9:55W	215 Ingraham	Oya Ardic	Disc 390	2:25R	6228 Soc Sci	Seungmoon Choi
Disc 382	11:00W	115 Ingraham	Oya Ardic	Disc 391	3:30R	1412 Sterling	Seungmoon Choi
Disc 383	12:05W	6102 Soc Sci	Tsung-Sheng Tsai	Disc 392	9:55F	B333 Van Vleck	Seungmoon Choi
Disc 384	1:20W	6310 Soc Sci	Tsung-Sheng Tsai	Disc 393	9:55F	122 Ingraham	Tsung-sheng Tsai
Disc 385	2:25W	55 Bascom	Zhonghua Wu	Disc 395	12:05F	B129 Van Vleck	Seungmoon Choi
Disc 386	3:30W	6314 Soc Sci	Zhonghua Wu	Disc 396	11:00F	14 Ingraham	Seungmoon Choi
Disc 387	11:00R	6322 Soc Sci	Zhonghua Wu	Disc 397	11:00F	B305 Van Vleck	Tsung-Sheng Tsai
Disc 389	12:05R	114 Ingraham	Zhonghua Wu	Disc 398	12:05F	23 Ingraham	Tsung-Sheng Tsai

PART I: TRUE/FALSE QUESTIONS (2 points each: Allow 5 minutes)

On the coding sheet, darken choice **A** if you think the statement is **TRUE**, and darken choice **B** if you think the statement is **FALSE**.

Question 1: Microeconomics focuses on the determination of issues like unemployment, inflation, and interest rate.

    A. True
    B. False

Question 2: It is meaningful to make a comparison between Japanese GDP and German GDP.

    A. True
    B. False

Question 3: Imagine a world of two countries that have the same resources. Each country can produce only two goods: apples and oranges using different technologies. Assume that the PPFs for both countries are linear. In this world, it is possible that neither country will have a comparative advantage in the production of either of the goods.

    A. True
    B. False

Question 4: Consider the market for cassette tapes (tape is a normal good). If the price of a cassette player rises and tape production technology is improved, then the price of tapes will go down and the quantity of tapes purchased will increase.

    A. True
    B. False

Question 5: If the market price is below the equilibrium price, there will be an excess supply and the market price will rise.

    A. True
    B. False

PART II: MULTIPLE CHOICE QUESTIONS (3 points each: Allow 24 minutes)

Use the following information to answer questions 6 and 7.

The following table describes the production possibilities for some country:

Plan	PCs (in millions)	Cars (in millions)
V	0	120
W	40	110
X	80	85
Y	120	50
Z	160	0

Question 6: Which of the following statements is a FALSE statement?

    A. Plan V, which requires no PCs to be produced, is an efficient plan of production.
    B. The combination of production of 70 PCs and 70 Cars is a feasible plan.
    C. The opportunity cost of moving from plan V to plan X is 80 PCs AND 35 Cars.
    D. The opportunity cost of moving from plan Z to plan Y is 40 PCs.
    E. This PPF satisfies the principle of increasing opportunity cost.

Question 7: Which of the following statements is the BEST description about the "movement" from plan X to plan Y?

    A. A hail storm damages cars.
    B. The GDP of this country has been increasing.
    C. There is a new technology developed in producing PCs.
    D. We are observing data from different years.
    E. Since they are both feasible plans, this is not really a movement, but rather a comparison between different production plans.

Question 8: Tom makes $20 an hour as a clerk. He must take 2 hours off work (without pay) to go to the dentist to have a tooth pulled. The dentist charges $100. What is the entire opportunity cost of Tom's visit to the dentist?

    A. $20
    B. $40
    C. $100
    D. $120
    E. $140

Question 9: One reason that economists so often disagree is:

    A. They are influenced by the public.
    B. Economists can never predict real world results.
    C. Economists often have different visions of what the ideal economy should achieve.
    D. Each faction knows that they are the ones with all the facts.
    E. Economics is too complicated to understand.

Question 10: Which of the following will shift the supply curve for good X to the left?

    A. A fall in the wages of workers who produce good X
    B. A shortage in X
    C. Innovations that increase the efficiency of the production technology for good X
    D. An increase in the cost of equipment used in the production of good X
    E. A surplus in X

Question 11: What will happen in the market for American-style restaurants (burger places) if the wages of burger chefs go up and the number of Chinese restaurants increases? Relative to the initial equilibrium,

    A. The equilibrium price of the American-style meals will increase, but the impact on the quantity of meals sold will be ambiguous.
    B. The equilibrium price of American-style meals will increase, and the quantity of meals sold will decrease.
    C. Both the equilibrium price and quantity of American-style meals will decrease.
    D. The equilibrium quantity of American-style meals will decrease, but the impact on their price will be ambiguous.
    E. The equilibrium quantity of American-style meals will increase, but the impact on their price will be ambiguous.

Question 12: The demand for donuts (measured in dozens) in Madison is given by the equation $Q_D = 800 - 60P$. The supply curve is given by the equation $Q_S = 25P - 50$. What is the equilibrium price for a dozen of donuts?

    A. $8.00
    B. $8.50
    C. $10.00
    D. $11.00
    E. $12.00

Question 13: Suppose the market for gasoline in Madison is initially in equilibrium. What will happen to the equilibrium price and quantity as a result of an increase in the price of crude oil (raw material)?

    A. Price goes up, quantity goes down
    B. Price goes down, quantity goes down
    C. Price goes down, quantity goes up
    D. Price goes up, quantity goes up
    E. Price and quantity are both indeterminate

Question 14: Suppose city officials decide rents are too high in Madison. They enact an ordinance placing a maximum rent of $500 on two-bedroom apartments (For simplicity's sake, let's assume all apartments are reasonably comparable in size, quality, location, etc.). This ordinance, if effective, will

    A. Create a housing shortage
    B. Result in the creation of other rationing devices for the market in apartments since price will no longer be free to clear the market, i.e. equate supply to demand
    C. Reduce landlords' investments in property maintenance over time
    D. (A) and (B)
    E. (A), (B) and (C)

Question 15: Madison liberals often talk about the Living Wage. Suppose the Living Wage is defined as a guaranteed hourly wage rate such that a recipient working full-time would earn an income above the US poverty standard. If this Living Wage is enacted, and is greater than the equilibrium wage rate, then

    A. The market will adjust to this and find a new equilibrium
    B. There will be involuntary unemployment
    C. Everyone will benefit from this program
    D. It is possible that this program might actually negatively impact low wage earners
    E. (B) and (D)

Question 16: Suppose the initial demand curve for good X is given by

$$Q_D = 10 - P.$$

Income for the individuals in this market increases and the demand curve is now given by

$$2Q_D = 10 - 2P.$$

We know that good X is

    A. A necessity
    B. An inferior good
    C. A luxury
    D. A normal good
    E. (A) and (D)

Question 17: To find the market demand curve:

    A. Add the quantities demanded by each individual at a particular price together to get a single point on the market demand curve. Continue this process selecting different prices to find the market demand curve.
    B. Add the prices each individual is willing to pay for a particular quantity together to get a single point on the market demand curve. Continue this process selecting different quantities to find the market demand curve.
    C. All demanders must demand zero units of the good at the same price.
    D. (A) and (C)
    E. (B) and (C)

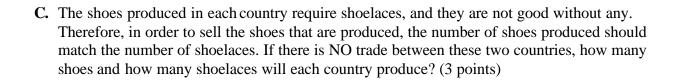**PART III: PROBLEM (14 points: Allow 21 minutes)**

Please write your answers legibly.

Imagine there are only two countries in the world: the United States and Japan. These two countries produce only shoes (S) and shoelaces (L). The equation for PPF of the US is given by $4S = 100 - L$ and it is $S = 100 - 4L$ for Japan. Both shoes and shoelaces are measured in pairs.

A. Find the opportunity cost of shoes and shoelaces in both countries. ($ points)

B. Which country has absolute advantage in the production of shoes? In the production of shoelaces? Which country has comparative advantage in the production of shoes? In the production of shoelaces? (2 points)

PLEASE TURN PAGE

C. The shoes produced in each country require shoelaces, and they are not good without any. Therefore, in order to sell the shoes that are produced, the number of shoes produced should match the number of shoelaces. If there is NO trade between these two countries, how many shoes and how many shoelaces will each country produce? (3 points)

D. If the countries specialize and then trade with each other, how will this make them better off? Include a numerical example to support your argument. Assume neither country is required to produce an equal number of shoes and shoelaces. [Hint: Start from the production pattern you found in part (c) above and allow the countries to trade.] (5 points)